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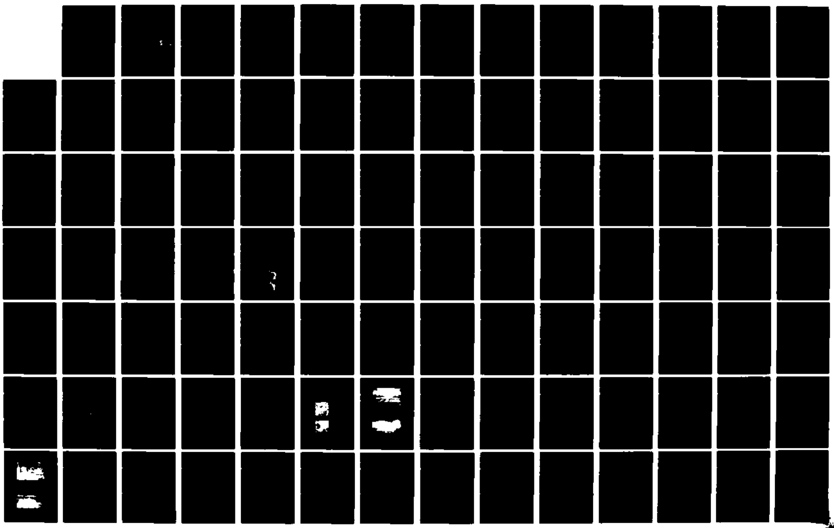

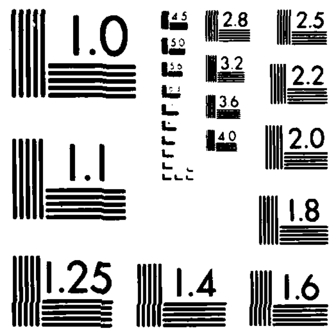

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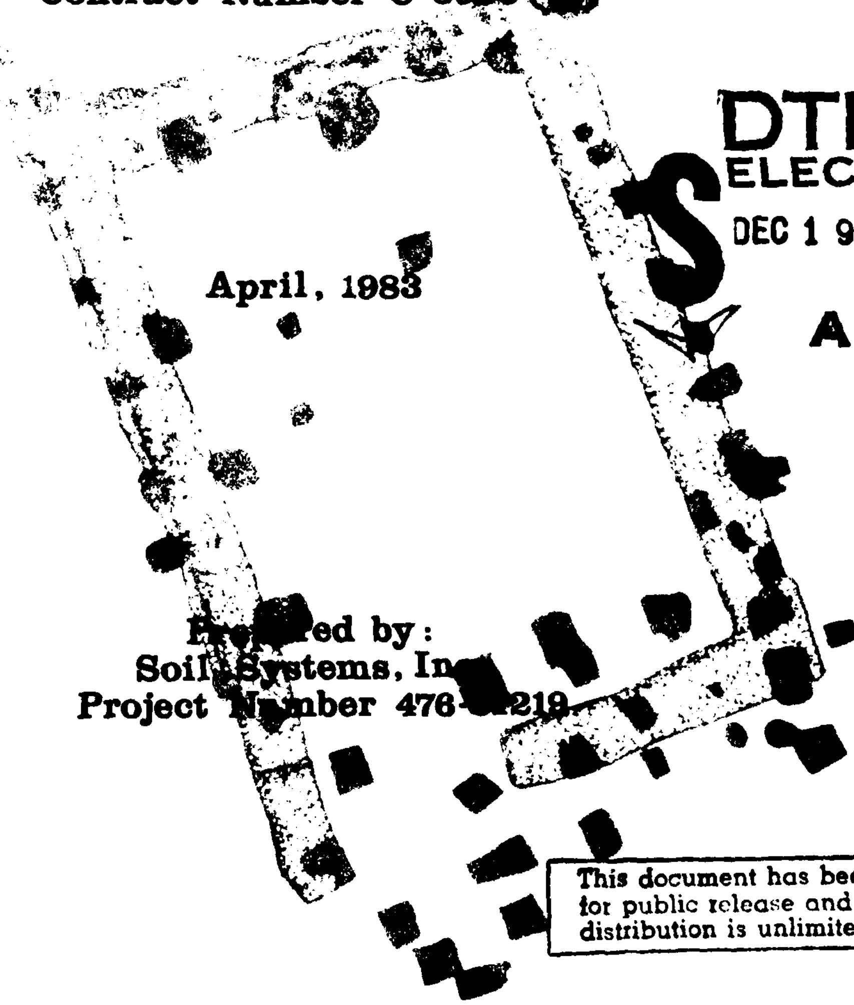

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ABSTRACT

This report details an archaeological testing and mitigation effort conducted by Soil Systems Inc. at six historic sites in Berkeley County, South Carolina. The purpose of the project was to assess the significance of the sites and to mitigate the construction impacts of the U.S. Army Corps of Engineers' Cooper River Rediversion Canal Project. Five sites were tested during spring 1979. Three of these sites and an additional site recommended by Interagency Archeological Services-Atlanta were subjected to intensive data recovery during the summer and fall of 1979. Twenty-nine structures and many associated features were examined at two eighteenth century plantations. Historical research produced evidence sufficient to characterize their slave occupations. The results of this research included extensive archaeological and historical data shedding light on eighteenth century African slaves. The conclusions offer new insights into the institution of slavery and offer a basis for future research.

FOREWORD

"History," notes Ira Berlin in his preface to Slaves Without Masters, "is the study of exceptions." When it comes to the early history of Afro-Americans in this country the historical record is exceptional in its silence. This is one of the main reasons why historical archeology research in the seventies assumed as a mandated imperative the reconstruction of the Afro-American experience, lifeways, culture and history from colonial times to the early twentieth century.

The New York Times, in a Sunday editorial in the fall of 1982, touted archeology as "man's greatest library," and increasingly, governments are becoming aware of the potential of archeology to serve as the mediator between science, culture, and identity. It is in this context that we present this study of eighteenth century African slaves on the South Carolina coastal plain. The study is significant in a number of ways: in the differences it highlights between colonial and antebellum plantation systems; in its approach to the study of the process of acculturation as revealed in the archeological record; and finally in the contribution it makes to Black history by describing the early life of Afro-Americans as depicted in their own material remains. As James Deetz stated in summarizing the work at Parting Ways, "Since the artifactual and architectural remains of these communities are a better index of the life of Afro-Americans in their own terms, they hold great promise of supplementing American Black history in a different and important way...The archeology tells us that in spite of their lowly station in life they were the bearers of a life-style, distinctively their own, neither recognized nor understood by their chroniclers."

We are proud to present this volume as the second in our series of professional papers and we commend Pat Garrow, Tom Wheaton, Amy Friedlander and their colleagues at Soil Systems, Inc. for a job well done. The study represents a new reference standard in Afro-American archeology.

We would also like to take this opportunity to applaud the commitment and financial support which the Charleston District, Corps of Engineers has given to these investigations. This volume, as well as the preceding monograph on The Mattassee Lake Sites, was undertaken as part of the cultural resources mitigation program on the Cooper River Rediversion Canal, and it is to the credit of the District, and the South Atlantic Division personnel that we were given the latitude to carry out the research in such an expansive and stimulating way.

Victor A. Carbone
Chief, ArcheologicalServices,
National Park Service

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We would also like to express our thanks to all those from California to Scotland who courteously answered our letters of inquiry. We regret that space does not permit us to name each one separately.

Individual research was conducted on four categories of remains. We wish to thank Elizabeth Reitz and Kay Wood of the University of Georgia for analyzing the faunal material; Paul Gardner of the University of North Carolina for his analysis of the floral material; Marvin Smith of the University of Georgia for his analysis of the glass beads; and Lane Greene of Greene Associates for research on mudwalled structures.

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I. INTRODUCTION

The Cooper River Historic Sites Investigation began with testing and historical research on five sites in Spring, 1979. A sixth historic site, 38BK245, had already been tested by the staff of Interagency Archeological Services-Atlanta and had been included among the mitigation priorities. The testing strategy, described in detail in the report which follows, involved surface reconnaissance, metal detector survey, and placement of three foot square excavation units. Two sites were eliminated during the testing phase due to extreme disturbances from agricultural plowing or disturbances related to plantation pine plantings (Garrow and Wheaton 1979). A third site was found during mitigation to have been noncultural in origin and was abandoned after a week of excavation.

The primary excavation effort was centered on three numbered sites (38BK75, 38BK76, and 38BK245) and extended for six months in the field with a six person crew (Figure 1). Two of these sites, 38BK75 and 38BK76, turned out to be slave occupations associated with Yaughan Plantation, while the third, 38BK245, was a portion of adjacent Curriboo Plantation.

The initial testing project was conducted under a relatively flexible research design. The project Request for Proposal included a series of guiding questions that were to be used to organize research on the sites. Those questions were grouped into three categories that were utilized in the proposal. The first category dealt with the ethnic identity and social context of the people who produced the archaeological remains under study. The second category of questions then placed the individual sites within their larger regional context, changing patterns of settlement through time, and economic variables. The third category of questions sought to place the sites within the larger realm of historical archaeology.

The testing research design elaborated on the guiding questions in the Request for Proposal through suggesting that the major thrust of the testing would be to determine if proper conditions existed on the sites to extract useable artifact patterns following South (1977a). The artifact pattern approach was perceived as the manner in which the questions of ethnicity and comparability could be addressed. The primary criteria established in the proposal for determining if potential for patterning data existed was the presence or absence of architectural remains in association with trash disposal. It was believed (and correctly as events transpired) that the key to constructing meaningful artifact patterns rested with knowing exactly where one was excavating within a site and insuring that individual structures and their associated domestic trash were included in the excavated areas. The priority for the testing phase then became a question of determining if the individual sites contained architectural remains that were sufficiently preserved to justify full scale mitigation.

The testing phase included historical research that was intended to answer basic questions concerning the sites under investigation. Four goals were identified in the proposal. Those goals were:

1. Development of a concise economic history of the Huguenot settlement in the general project area.

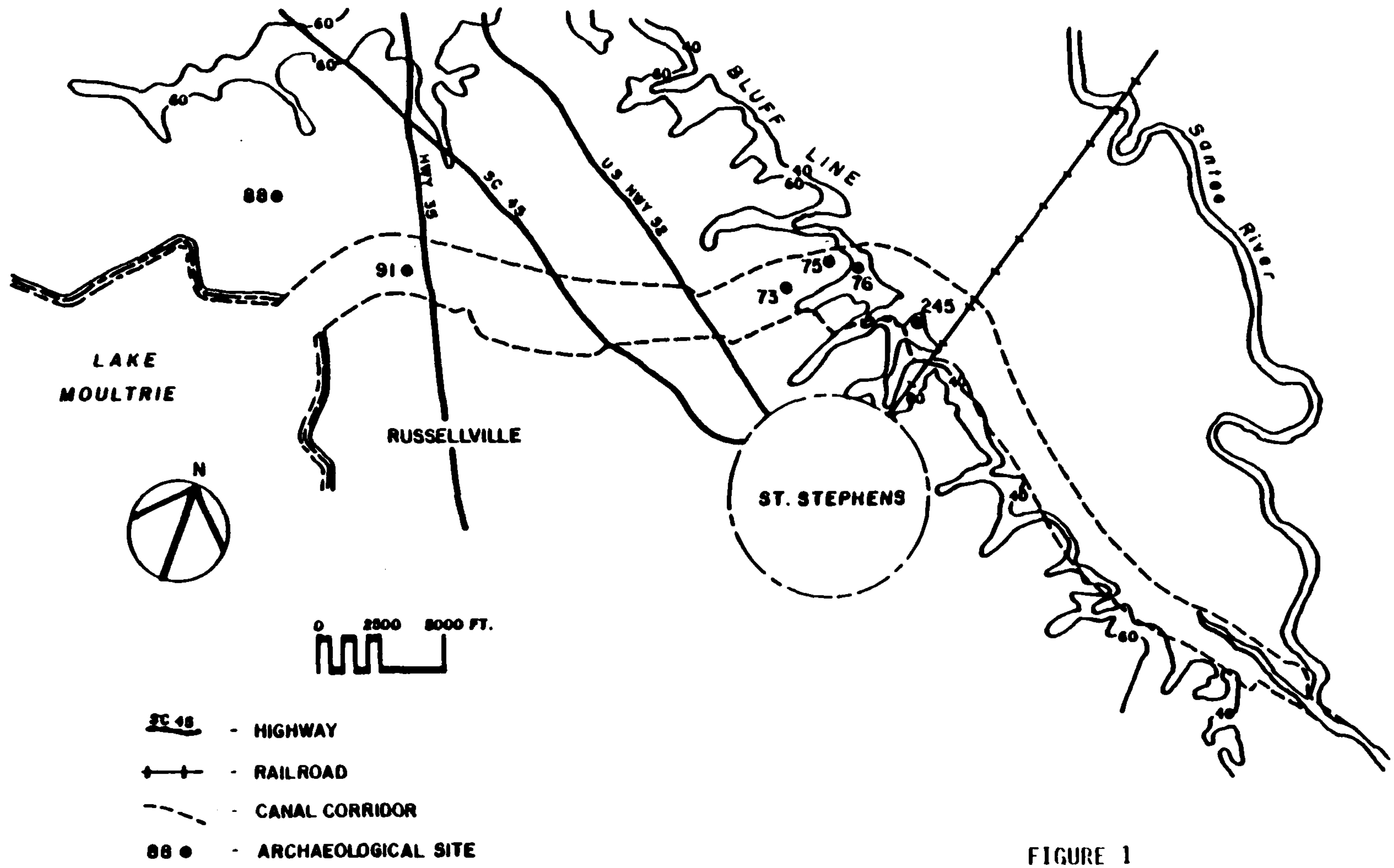


FIGURE 1
Project Area Location Map
Cooper River Historic Sites

2. Construction of chains-of-title for the parcels that contain the testing units.

3. Compilation of comparative economic data from an as yet undetermined British Colonial/Anglo-American plantation settlement area.

4. Identification of diaries and personal papers generated by individuals in the general project area that would provide insights into day-to-day life within local plantation systems.

Unfortunately, it proved to be impossible to do more than construct the chains-of-title during the historical research in the testing phase. It was assumed during the preparation of the proposal that the previous research (White n.d.) conducted on the historic sites would be useable with little more than verification. Attempts to cross-check that earlier research revealed that through a map error the research had centered on the wrong plantations. This meant that the limited research time available during the testing phase had to be employed in pursuing the item of highest priority, the chain-of-title.

The Request for Proposal emphasized that the major properties under study, Sites 38BK75, 38BK76, and 38BK88 had been owned and occupied by Huguenots. The research design amplified that emphasis, and early in the project it was assumed that evidence of ethnicity would relate to Huguenot versus Anglo-American occupation. It was not known prior to the testing phase if the sites had been occupied by owner, overseer, or slave. Also, the historical research prior to testing was not adequate to indicate that the Huguenot descendants who owned the sites were sufficiently removed from France in both time and space that they had become archaeologically indistinguishable from their Anglo-American neighbors. That information was to come much later in the project, as was the revelation that the sites that ultimately came under mitigation were primarily the products of occupations by Afro-American slaves.

The testing strategy used during the fieldwork was successful in delineating the mitigation priorities, but was not totally responsive to the types of sites present. The strategy involved surface reconnaissance, metal detector survey, and excavation of three foot test units. Architectural remains or features were found on two sites, while a third site yielded a mysterious feature that later proved to be nothing more than a burned tree trunk. The problem encountered with the testing strategy centered around the size of the excavation units. Three foot squares were simply too small to reveal the type of architectural evidence sought. The metal detector survey did locate the structural areas accurately as metallic clusters, but the units were, in most cases, too small to locate postmolds or allow interpretation of the hitherto undescribed wall trenches that made up the in-the-ground evidence of the structures. The test units did allow for an assessment of prior impacts and historic soil loss, but only hinted at the amount of architectural remains present at Sites 38BK75 and 38BK76.

The report prepared at the close of the testing phase consisted of documented recommendations covering the five tested sites as well as Site 38BK245 that had been tested by Interagency Archeological Services-Atlanta. Sites 38BK75, 38BK76, and 38BK73 were recommended for mitigation under various levels of effort. In addition, an 11-week field effort was recommended for Site 38BK245. Through subsequent negotiations, the level of effort on all of the sites save 38BK73 was increased. The historical research was also increased in scope and funding.

A number of problems impeded the field phase. The field crew was moved from site to site as construction priorities changed, resulting in time lost due to the inefficiency of gear ups and gear downs. A portion of Site 38BK76 scheduled for block excavation was damaged by a clearing contractor who ignored the flagging around the site. Also, Site 38BK76 turned out to be much larger than anticipated and the actual boundaries of the site were determined in the mitigation process. The inadequacies of the testing approach created problems during the entire field effort on Sites 38BK75, 38BK76, and 38BK245. The investigators were quite confident that the first two sites were well preserved and contained numerous structures based on the soil profiles and metal detector survey. Concrete proof of that feeling was lacking until the mitigation effort was underway on each site, and the fieldwork became a continuous round of increased levels of effort pieced onto previous work. The piecemeal approach used on these sites resulted in a level of inefficiency that diminished the outcome of the research.

Site 38BK245 presented special problems. Use of part of the site as a borrow pit had apparently destroyed the main house and an unknown portion of the slave quarters. The boundary of the Corps of Engineers property ran through the site and investigation on non-Corps land was forbidden. Also, the testing conducted by IAS-Atlanta at the brick kiln had been done the previous winter. Between the stripping of the main portion of the site prior to IAS-Atlanta involvement and the actions of freezing and thawing, a significant portion of the site had been lost before mitigation. Damage varied over the site and ranged from an almost total loss of the surface brick kiln to moderate to heavy damage on a cellar and a series of structures. Site 38BK245 was the last site to be completed and the clay subsoil was baked to the point that some of the features could not be excavated utilizing sensitive techniques. Significant data was extracted from 38BK245 despite these problems, but information was certainly lost on the site from prior impacts.

The Corps property boundary proved to be a problem on Sites 38BK75 and 38BK76 as well as on 38BK245. An area assumed to contain the main house for the slave quarters of 38BK75 and 38BK76 was located outside of the Corps' property and thus could not be investigated during the mitigation. An extensive surface collection was made of that area by the crew working on their own time, so that at least in this instance, some information was recovered. There is little doubt that the results achieved concerning Yaughan Plantation (Sites 38BK75 and 38BK76) would have been greatly enhanced if more comparable data could have been extracted from the main house area.

The historical research continued during the mitigation fieldwork and gradually pieced together a picture of the historical occupations at Yaughan and Curriboo Plantations. The last of the archival data collection and analysis was not completed until well into the archaeological analysis phase.

It was recognized fairly early in the testing phase that Sites 38BK75, 38BK76, and 38BK245 were primarily comprised of Afro-American slave domestic occupations. A level of confirmation of that impression was given by the historical research, and by the close of the fieldwork, there was no longer any doubt concerning the nature of the sites. The Cooper River Historic Sites Investigation was undertaken through a relatively new contracting procedure whereby the analysis phase of the project was negotiated as a separate contract at the end of fieldwork. This presented the opportunity to refine the project research design and lend greater specificity to the guiding questions to be asked during the analysis phase.

Five hypotheses were formulated at the conclusion of the fieldwork to insure orderly progress during the analysis. Each hypothesis was adequately tested during the analysis phase, and each was explored in terms of both archaeological and historical implications.

The first hypothesis dealt with the basic nature of colonoware (Ferguson 1977) ceramics.

> Hypothesis 1. The Colono ceramics recovered from Sites 38BK75, 38BK76, and 38BK245 represent ceramics that were made by slaves who occupied the plantations, and that the slaves produced those wares for their own use. It is further hypothesized that the Yaughan (and) Curriboo Plantation samples are representative of the colonowares that were being made and used by African slaves in coastal South Carolina during that period.

Three potential variables were considered while testing Hypothesis 1. The first variable was that the colonowares extracted from the sites may not be truly representative of ceramics being produced and used by African slaves in other areas. The first variable was controlled through limited comparison of the ceramic samples from Yaughan and Curriboo with collections from other sites. The second variable considered under Hypothesis 1 was that at least some of the slaves on the plantations were Indians and that the ceramics present were produced by Indians instead of Blacks. Careful historical research was employed to control that variable. The third variable considered was that the Afro-American slaves were the products of a number of different cultural groups, and that those diverse backgrounds would be reflected in a highly heterogeneous ceramic assemblage. That variable proved to be impossible to control with available data, and although there appears to be a degree of homogeneity in the ceramic sample, it still is not possible to attribute the ceramic styles to specific African groups.

The second hypothesis was largely an outgrowth of research by Lees and Kimery-Lees (1978) at Limerick Plantation in coastal South Carolina. Those investigators observed that there was a relative decline in the use of colonoware after 1775. Yaughan and Curriboo Plantations offered a good opportunity to study the nature of the decline of colonoware, and Hypothesis 2 was formulated to facilitate that effort.

> Hypothesis 2: Colonoware declined in importance at the plantations as time passed. Conversely, there was a trend toward greater dependence on non-locally produced ceramics from the eighteenth to nineteenth centuries.

The single variable identified that could affect Hypothesis 2 dealt with the nature of use of colonoware ceramics. That is, it was not known at that point in the analysis if the relative frequencies of colonoware through time was a function of chronology, status, acculturation, or a combination. That variable was controlled satisfactorily during the analysis.

The third hypothesis was the primary organizing question used throughout the project. That hypothesis dealt with the concept of artifact patterning as advanced by South (1977a) and was viewed as the major vehicle for cross-site comparisons.

> Hypothesis 3: Patterns of artifact disposal on archaeological sites are culturally determined and can be discerned through careful analysis. Since African slaves were the products of radically different backgrounds than Anglo-Americans, the pattern of artifact disposal on African slave domestic sites should be discernible from that present on Anglo-American sites. The difference will be expressed in varying frequencies of the artifact categories that the sites share in common, as well as the absence of certain categories.

Two potential variables were anticipated in the case of Hypothesis 3. First, it was anticipated that the concept of patterning as put forth by South (1977a) and Lewis (1973) may not reflect more than a few site specific cases. The consistent nature of the artifact patterns achieved on the Cooper River Historic sites seem to indicate that that variable was not at work in the case of this investigation. The second potential variable noted was that the artifact patterns could be influenced by the degree of acculturation present. That is, it was considered possible that Afro-Americans could have been so thoroughly acculturated at the time of occupation of the sites that no differences in artifact pattern would exist between them and Anglo-Americans. Significantly, the artifact pattern results do seem to indicate that acculturation was progressing through time on the sites and that the beginnings of a transition to artifact patterns more nearly like those on British-American sites was observable in the later occupations.

The final two hypotheses offered explanations for the architectural shifts or differences noted on the sites during the excavation phase.

> Hypothesis 4: The earliest construction technique in use within the Yaughan Plantation slave quarters involved wall trench construction coupled with the use of a few individual postholes. As time passed, that mode was superceded by the use of entirely individually set posts. This construction sequence represents a transition from construction techniques used in the Carribbean and/or Africa and reflects the greater acculturation of slaves into the British-American sub-culture as time passed.

> Hypothesis 5: The earliest construction technique within Curriboo Plantation involved wall trench construction coupled with the use of a few individual postholes. As time passed, that mode was superceded by the use of brick pier construction for major plantation outbuildings. This construction sequence represents a transition from a frontier pattern to a more permanent settlement pattern and a successful adaptation to prevailing economic trends.

Hypothesis 4 dealt exclusively with domestic architecture, while Hypothesis 5 addressed the non-domestic architecture encountered at Curriboo Plantation. The major variable identified in the research design that could affect those two hypotheses dealt with the nature of French architecture at the time the sites were occupied. It was recognized that wall trench construction was known on some French occupied sites, and it was thought possible that the wall trenches encountered at Yaughan and Curriboo could relate to that tradition. That variable is discussed in the architecture section of the following report.

The historical research proposed for the analysis and reporting phase was viewed as an adjunct to pursuing the stated archaeological goals. A series of questions concerning the chronology, social content, and economic system of the plantations were posed. The historical research phase was unusually productive in this regard. Despite the fact that personnel changes occurred during the research and synthesis stage and the funding for the historical research was not continuous, an excellent data yield was achieved. Perhaps the key information developed during the historical research was the fact that demographic continuity existed at both plantations within the slave populations during the course of the occupations. This means that the archaeological data retrieved was produced by relatively stable communities and that changes reflected in the archaeological record were indicative of cultural/social versus population changes. This validates the concept that the archaeological research did measure acculturation as reflected by material culture for the period from approximately 1740 to 1826.

The sub-specialty of Afro-American archaeology has an unfortunately brief history. While the first substantive research conducted on a site occupied by an Afro-American was published in 1945 (Bullen and Bullen 1945), it was not until the late 1960s and early 1970s that a systematic attempt was made to develop Afro-American archaeological research (Ascher and Fairbanks 1971; Fairbanks 1972; and Schuyler 1974). The most extensive research conducted at

that time centered on the Florida and Georgia coastal areas and dealt exclusively with nineteenth century sites. While the coastal investigations conducted by the University of Florida appear to have begun as an attempt to identify surviving African traits in the archaeological record (Fairbanks 1972:90), those investigations have since been broadened to incorporate a number of other anthropologically sound research questions. Perhaps the major contribution of the Florida studies to date has been through the work of John Otto (1975, 1977, and 1979). Otto's dissertation (1975) remains the most exhaustive work on a single plantation site that has been reported under the rubric of AfroAmerican archaeology. The Florida program in Afro-American archaeology is still underway (Mullins-Moore 1979 and 1980; Singleton 1979; and Hamilton and Marrinan 1979) and promises to make additional substantive contributions to our knowledge of nineteenth century Afro-American life.

Research on Afro-American sites was not restricted to the Florida program during the 1970s. Perhaps one of the most influential projects to the development of Afro-American archaeology was the work undertaken by James Deetz (1977:138-154) in 1975 at the Parting Ways Site near Plymouth, Massachusetts. Deetz's primary emphasis paralleled that of Fairbanks (1972) in that he was interested in survivals of African traits on a late eighteenth to mid-nineteenth century site, but he also focused attention on the whole question of Afro-American archaeology through his eloquent popularized account.

The New York City area witnessed some of the earliest sustained archaeological work on Afro-American sites. Robert Schuyler (1974) conducted historical and archaeological work at Sandy Ground on Staten Island as early as 1971, but, to date, a comprehensive report on that project has not been published. The available published sources on that work indicate that once again the sites investigated were relatively late, with the Afro-American settlement at Sandy Ground postdating 1820 (Schuyler 1974:18).

The Weeksville Project, located in the Bedford-Stuyvesant section of Brooklyn, was undertaken prior to Schuyler's research, with excavations dating as early as 1968 (Salwen and Bridges 1974; Bridges and Salwen 1980). Weeksville was a black community established around 1827 (Bridges and Salwen 1980:39) and only limited results were gained from the investigation.

During the late 1970s, interest in Afro-American archaeology spread rather rapidly with work conducted in the Southeast (Carillo 1980; Drucker 1979; Drucker and Anthony 1979; Lees 1979; Lees and Kimery Lees 1978; Lewis and Haskell 1980; and Smith 1976), the Mid-Atlantic (Geismar 1980, Kelso 1976; and Outlaw, Bogley, and Outlaw 1977), and the Northeast (Bower and Rushing 1980). Perhaps one of the major breakthroughs of the late 1970s has been the positive identification of ceramic types made by Afro-American slaves. That work has been pioneered by Leland Ferguson (1977 and 1980) who has published an excellent assessment of "Colono" ceramics. Ferguson's work has keyed primarily on coastal South Carolina, North Carolina, and Virginia. The full geographical range of "Colono" ceramics is currently being explored, but available information does indicate that "Colono" ceramics, presumably of African slave manufacture, do occur in the Caribbean (Gartley 1979 and Vescelius 1977).

Although the majority of the work conducted on Afro-American sites in recent years has been done following other problem orientation approaches, several persistent shortcomings have hampered the development of this sub-specialty. Most of the investigated sites have dated from the nineteenth century and have dealt with populations who apparently had become rather thoroughly acculturated within the larger Anglo-American culture. This has made it difficult to assess the nature of the ethnic differences that may be apparent in the archaeological record. A second difficulty has been the limited scope under which most of these projects have been conducted. Many of these projects have been little more than extended testing investigations and have provided little more than tantalizing glimpses into the nature of Afro-American sites. A third problem relates to the newness of the sub-specialty. That is, much of the research undertaken to date is available in little more than summary form as a good bit of the more germane research is still underway or just recently completed. An additional problem, one that has hampered many types of historical archaeological research, is the lack of artifact quantification in most of the existing studies. Exceptions do exist (Drucker and Anthony 1979; Lewis and Haskell 1980), but for the most part reports on Afro-American excavations have not included full artifact lists or descriptions.

The investigation of Yaughan (38BK75 and 38BK76) and Curriboo Plantations (38BK245) should fill some major gaps in Afro-American archaeology. Both sites were apparently occupied by 1740, and the latest portion of Yaughan was abandoned by approximately 1826. Large scale excavations were undertaken on both sites, with numerous structures fully investigated. Perhaps the most important revelation achieved from the fieldwork and analysis was the nature and extent of acculturation evident from the earlier to later portions of the sites. This is hardly surprising given the early dates of the occupations, but it is heartening to note that fairly subtle culture change can indeed be detected through archaeological investigation, especially when coupled with sound historical research.

II. ENVIRONMENTAL SETTING

Introduction

The Cooper River Rediversion Canal Project is located in the northern third of Berkeley County, South Carolina, between Lake Moultrie on the west and the Santee River on the east (Figure 2). Berkeley County is situated in the Atlantic Coastal Plain Province (Brockington 1980:5), sometimes termed the Atlantic Coast Flatwoods area (Long 1980:47). This physiographic province is characterized by a low flat topography, cultivated fields, and pine and oak-hickory woodlands. In general, it tends to be swampy and poorly drained. The total environment affected not only prehistoric settlement, but also historic settlement in the area, much more than is the case today. For this reason, a general physical description of Berkeley County and the sites discussed in this report is necessary.

Topography

The geologic formations underlying Berkeley County and which have most greatly affected the soils are unmetamorphosed sedimentary sandstones, limestones, and shales. The uppermost formations, having the most direct impact on soil building processes, are Black Mingo sandstones and limestones (Brockington 1980:5). The large number of "orthoquartzite" prehistoric artifacts attests to the utility of this sandstone formation for tool making by prehistoric peoples, although the quality of the material does not approach that of coastal plains chert.

Overlying the sandstone and limestone formations are marine and fluvial soils deposited during the Pleistocene. These soils were deposited in four terraces: the Wicomico, 70-100 feet A.S.L.; the Penholoway, 42-70 feet A.S.L.; the Talbot, 25-42 feet A.S.L.; and the Pamlico, 0-25 feet A.S.L. (Long 1980: 43). Based on associated soil types and elevation, Sites 38BK73, 38BK75, 38BK88, and 38BK91 were located on the Wicomico terrace; 38BK245 was on the Penholoway terrace; and 38BK76 was on remnants of the Talbot terrace.

The Santee River forms the northern and northeastern edge of Berkeley County, and during the colonial period most settlement was restricted to the south bank. The river was navigable by small boats upstream from the Atlantic, at least as far as St. Stephen, and provided a means of transport for goods. Historical documents tend to show, however, that most transport was over roads to Charleston during the eighteenth and early nineteenth centuries (Chapter III and Orvin 1973:69). The south bank of the Santee consists primarily of a wide swamp in the St. Stephen's area. This swamp was utilized by some planters for rice cultivation and indications of old rice fields are evident on aerial photographs of the swamp near Curriboo plantation (Figure 1). No archaeological fieldwork was conducted in this area, however.

Moving inland from the swamp there is a steep bluff abruptly rising 10 to 20 feet. It was along this bluff that three of the sites (38BK75, 38BK76, and 38BK245) were located. According to the Mouzon 1771 Map, most plantations of the colonial period were, in fact, located along this bluff. For example, at Yaughan and one of the Porcher plantations further upstream, the highest

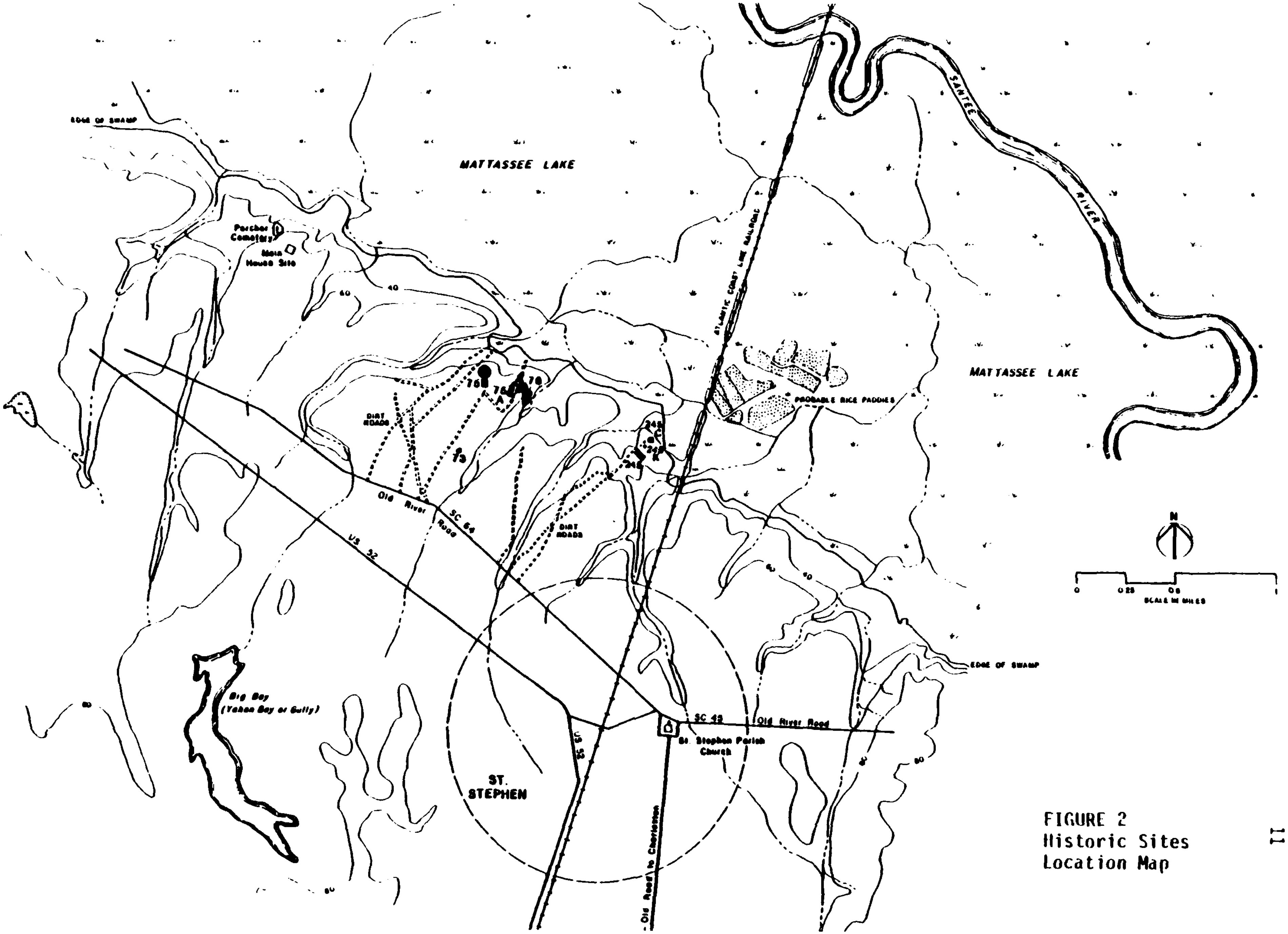


FIGURE 2
Historic Sites
Location Map

knoll or rise near the bluff was apparently occupied by the main house, and the outbuildings and slave quarters are on lower areas and often closer to the river.

Inland areas tend to be nearly level with low rises. Inland low spots frequently contain standing water much of the year, and the larger of these areas are usually termed bays, a synonym for swamp, and are included on maps of the area as important topographic features. Sites 38BK73, 38BK88, and 38BK91 were located in this zone.

The project area can, therefore, be divided into three zones: the Santee River floodplain, the bluff, and the inland zone. Only the last two contain habitation sites with structural remains in the project area. As noted below, soils, fauna and flora tend to follow these zones, with some overlapping in specifics.

Soils

The following information on Berkeley County soils is taken from Long (1980), the Soil Conservation Service's county soil survey. For a more in-depth discussion of general soil types in other parts of the county, this work should be consulted.

Site 38BK73, a field scatter of artifacts and tree fall, was located on Bonneau loamy sand with 0 to 2 percent slopes. The site itself was in a flat, cultivated field. Bonneau loamy sand is deep and moderately well drained. It makes up 2.4 percent of the soils in Berkeley County. It also has moderate limitations on agriculture due to leaching of nutrients, and fertilizing is therefore needed frequently in small amounts. The main crops are cotton, corn, and soybeans. Open and woodland wildlife potential is good, but wetland potential is poor. Use as construction material is restricted to road fill. Acidity generally ranges from pH 4.5 to 5.5.

Sites 38BK75 and 38BK88, a slave quarter and an isolated farmstead, were located on Norfolk loamy sands in level or nearly level cultivated fields. This soil type makes up 1.9 percent of Berkeley County and is principally under cultivation. It is better drained than Lynchburg (38BK91) and Bonneau (38BK73) soils. The main crops cultivated on this soil are tobacco, cotton, corn, and soybeans. The only real problem for agriculture is erosion, which can easily be controlled by windbreaks, crop rotation, and contour plowing on more sloping land. It has good potential for open and woodland wildlife, but very poor potential for wetland species. It is reasonably good for road fill, but unsuited for construction sand. Acidity is not as great a problem with Norfolk soils as with the other soils discussed here, having a pH ranging from 4.5 to 6.0. It might be noted that none of the soils approach neutral pH any closer than the 6.0 recorded here.

Site 38BK76, a slave quarter, had Pantego fine sandy loam and was located in a mature oak-hickory forest. Pantego soils are nearly flat, deep, and very poorly drained. These soils make up 3.6 percent of county soils. Most Pantego soils are in woodland or are occasionally used for pasture. Poor drainage, combined with low organics, present moderately severe hazards to agriculture. Wildlife potential is fair for openland species and good for

woodland and wetland species, the only soil discussed here which is compatible with wetland species. Pantego loam is unsuitable as a construction material and is relatively acid, pH 3.6 to 5.5.

Site 38BK91, the scattered remains of a brick clamp, had Lynchburg loamy sands. This soil type occurs on 0-6% slopes, and the site itself is on generally flat low ground. Lynchburg loamy sand makes up 3.6% of Berkeley County and is principally in forest. Lynchburg sands have moderate limitations on agriculture due to wetness which hinders plant growth. Drainage and frequent plowing are required to dry out the soil and maintain tilth. It has good potential for open and woodland wildlife, but only fair for wetland species. It is not of particular use for construction, such as road building or sand in concrete. It also tends to be quite acid, pH 3.6 to 5.5, which partially explains its wide use for pine plantation.

Site 38BK245, a portion of Curriboo Plantation, was situated on Wahee loams, which are nearly level, deep, and poorly drained. These soils represent 6.2 percent of soils in the county and are mainly in pine forest. Poor drainage greatly hinders agriculture. With drainage these soils are used mainly for corn, soybeans, and cabbage. Wildlife potential is good for open and woodland species and only fair for wetland species. Construction use is very limited and acidity is between pH 4.5 and 5.5.

Climate

The climate of Berkeley County can be characterized as subtropical. Summers are long, hot, and humid. The warmest month is July with an average temperature of 80.1°F., and the coldest month is January with 46.8°F. Two years in ten (as occurred during the fieldwork), July will have a temperature higher than 99.1°F. July is also the wettest month, averaging 7.1 inches of rainfall (Long 1980:93). Rain at this time of the year comes in afternoon thundershowers. During the summer of 1979, these thunderstorms were very regular, arriving out of the southeast between 3 and 4 o'clock for days on end. The driest month is November with 2.0 inches of rain. There is an average of 260 frost free days a year in Berkeley County, beginning in early March and continuing until early November. Sixty-six percent of the yearly rainfall comes between April and September, so that this overlap results in an excellent climate for single or successive planting of crops.

Habitats

The native fauna of Berkeley County can be divided into three groups: openland, woodland, and wetland habitats. These three groups have already been mentioned in the soil descriptions above. Openland fauna include rabbit, fox, and assorted gamebirds, including quail and dove. The woodland habitat attracts turkey, opossum, fox, raccoon, deer, and bobcat. Wetland species represented are duck, goose, heron, muskrat, mink, and occasionally alligator (Long 1980: 36). During the course of fieldwork, quail, dove, wild turkey, deer, and heron were noted along with water moccasins, rattlesnakes, and other non- poisonous snakes. Wild fauna seemed abundant, especially in and near wooded areas. Archaeologically, white-tailed deer, goose, opossum and snakes were found at Yaughan and Curriboo in trash features.

These animals feed on and are provided with cover by a wide variety of wild and domestic plants. In open areas, wild plants consisted of Indian grass, goldenrod, and pokeweed as well as other weeds and grasses. Wooded areas were generally mature oak-hickory or pine forests with minor amounts of sweetgum, dogwood, briars, shrubs, and vines. The only site approaching a native habitat before testing was 38BK76, which had been covered by an oak-hickory forest with occasional pine and dogwood. Sites 38BK73, 38BK75, 38BK88, and 38BK245 were cultivated fields before testing and 38BK91 was in pine plantation.

Natural Resources

From the archaeological and historical evidence the natural resources used by the historic inhabitants for commercial purposes were relatively restricted. There are no precious metals or commercially exploitable minerals, except lime, available to the occupants in Berkeley County. On the other hand, there were a few other natural resources which provided supplementary sources of income to the plantation owners and to their slaves.

As land was cleared and before the first commercially successful crops could be harvested, the forests provided a major source of outside income for many planters. At Site 38BK245, a warehouse or processing shed cellar had a thick layer of pine tar which indicated storage or production of naval stores. This will be discussed in later sections of this report. No indications were found archaeologically of lumber production at any of the sites, but historical documents indicate that pine pitch was being traded between planters for farm use (Chapter III), and general historical accounts point out that the region was known for production of naval stores. Wood products in the form of lumber and barrel staves were also sold to factors in Charleston for eventual shipment and sale to Britain during the eighteenth century (Orvin 1973:58, Sirmans 1966:226).

Another major resource was the soil itself. This is evident from the archaeological record in two forms. Sites 38BK91 and 38BK245 had remains of brick clamps. Without trace element analysis, it is impossible to be completely certain that the source for brick clay was the St. Stephen area. However, examination of soil samples and historical documents strongly supports the contention that brick making was a local industry using local materials (Dubose n.d.). The red clay subsoils, especially near the brick clamp at 38BK245, fire to the same consistency, color range, and hardness as bricks from the clamps and from the other sites excavated. Evidence for locally made brick is rife in the literature (Noel Hume 1978). Its presence in St. Stephen would not be surprising. The economic importance of brick making for the sites discussed here is not clear, but indications are that the use of brick structures and, therefore, the demand for brick, were not great.

Of more economic and social importance was the use of local clays for the production of unglazed ceramics. No mention is made of slave produced ceramics in day book accounts accessed here, but the vast quantities of colonoware retrieved from nearly all of the sites points to its importance in the daily life of the slave population. At Site 38BK76, over 88 percent of the ceramics and over 67 percent of the total artifact assemblage were colonoware. This site is the most extreme example, but significant amounts of colonoware

were also recovered at 38BK75 and 38BK245. A much lower percentage of colonoware at later and non-slave sites indicates that its primary importance was within the material culture of the slave population. As a result of this abundance of colonoware, the savings felt by the slave owners, who did not need to supply slaves with more costly non-local ceramics, must have been significant; whether or not they were actually aware of it. It is possible that some slave owners would not have made up for a lack of colonoware by some other means (for example, tin plates, non-local ceramics, wooden trenchers), but on the whole, directly or indirectly, slave owners profited by colonoware production.

Other natural resources provided by the environment include edible plants and animals. Many of these have already been mentioned. A complete discussion of subsistence is presented in a separate section. It is enough to say here that archaeological evidence for use of native resources for food is poor.

An historical account of agriculture is presented elsewhere. Of interest to this discussion are requirements of indigo, rice, and other staple crops with respect to the available natural resources. The indigo plant requires a light sandy soil, complementing rice, which requires a wet swampy environment (C.W. 1755:202, de Beauvais 1769). Both types of environment are present in the study area. Rice and indigo also complement each other with respect to seasonality (Sirmans 1966:269), thus providing continuous, nearly year round employment for the work force, without the need of resorting to forest products or brick making for outside income.

From deeds, plat maps, and modern soil maps, it appears that both Yaughan and Curriboo plantations consisted of approximately 50 percent swampland, of potential use for rice cultivation, and 50 percent upland of use to habitation and upland crops, including indigo. This would mean that approximately 500 acres at Yaughan and 600 acres at Curriboo were available for rice, and the same amounts for indigo and other crops. According to historic sources, one to four acres of indigo was the average cultivated per field hand (C.W. 1755). Assuming that an average of 30 field hands (out of a total 40 hands at Yaughan) were available for fieldwork, a maximum of 120 acres could have been planted in indigo at anyone time, leaving the remainder for other uses.

Unfortunately, the available records cannot tell us how close the owners came to this hypothetical goal for indigo production. This is so because the available records are incomplete, entries concerning production may not represent yearly totals, entries may show only John Cordes' portion of respective harvests, and they may represent only that portion of produce sold on the open market for cash. With more complete and reliable data, it might be possible to calculate not only the economic importance of indigo to the plantation, but also the numbers of slaves and acres of land devoted to indigo, rice, and other crops. This kind of data would allow detailed study of land use patterns, soil management skills, and labor productivity.

One conclusion that may be drawn from this data is that not all of the land available for indigo and rice cultivation could possibly have been cultivated at any one time with the labor available. Whether this was a decision freely made by the landowners, or whether economic conditions forced the decision upon them is unknown. But Yaughan with 500 acres and Curriboo with 600 acres of uplands, could have employed up to 125 to 150 field hands for indigo cultivation respectively, and all indications are that these totals were never reached.

Other crops were also grown on the plantation for home consumption as well as for sale or trade in the St. Stephen area. These included grains and vegetables which competed with indigo for upland soils. No other crops are reported to have competed with rice for swampland. As noted above, the soils available for cultivation were generally good for corn, tobacco, and cotton. Today, soybeans have become one of the major cash crops along with the three just listed.

Intense cultivation of the Santee River floodplain and inland areas since the early eighteenth century has had an effect on the topography. This is seen mainly by erosion from upland areas and silting of the Santee River floodplain. Silting and flooding are two of the reasons why rice production became uneconomical above the tidewater zone at the beginning of the nineteenth century. Today, the floodplain has been left almost entirely to natural vegetation and wildlife, with minor attempts at growing upland crops in heavily silted portions. Until the past 20 or 30 years, cattle and hogs were allowed free rein in the floodplain, according to local informants. Today, however, even this use of the floodplain has been curtailed.

III. HISTORIC OVERVIEW

Introduction

The project focused on three historic sites at two plantations. Only a minimal amount of prehistoric material was recovered from the sites. For these reasons, an overview of the prehistoric period is included as Appendix A of this report. The following chapter presents an overview of the development of South Carolina and St. Stephen's Parish with special emphasis on economic development and slavery in order to establish a framework for the discussions which follow.

Protohistoric

The Protohistoric period begins with initial European contact prior to the achievement by Europeans of hegemony in this area. It opens in the mid-sixteenth century with the Spanish occupation of North America and ends in the latter part of the second decade of the eighteenth century with the destruction of the Yemassee. It focuses on the impact these contacts had on the indigenous peoples. This section relies heavily on the detailed research into Indians of the South Carolina low country completed by Gene Waddell, Director of the South Carolina Historical Society in Charleston.

Waddell (1980) identified 19 tribes indigenous to the coast between the Santee and Savannah Rivers; these included the Escamacu, the Hoya, Edisto, Touppa, Mayon, Stalame, Kussah, Kussoe, Wimbee, Combahee, Ashepoo, Wando, Sampa, Seewee, Kiawah, Stono, Witcheaugh, Bochiket, and Etiwan. From 1562 to 1576, the earliest period of European contact in the vicinity of Port Royal, no tribes were known to live in the region between Port Royal and Charleston Harbor. In the late sixteenth century, however, the coastal tribes, beginning with the Edisto, who moved from the Broad River north to Edisto Island, began to migrate northward in order to avoid contact with the Spanish (Waddell 1980: 1-5). After 1580, the distribution of the coastal tribes evidently remained fairly stable, until the English occupied the area around the confluence of the Ashley and Cooper Rivers in 1670. Resources were evenly distributed, and one section offered little that another did not match. Fairly equal size and resources seem to have created a "small-scale balance of power" among the Coastal Tribes (Waddell 1980:19). Within their territories, the tribes were evidently autonomous and collectively, they were disunited (Waddell 1980:16). They seem to have formed no alliances with tribes beyond the coastal area, although they appear to have been familiar with and known to groups as far south as St. Augustine, as far north as Cape Fear, and nearly 500 miles inland (Waddell 1980:22).

English occupation after 1670, as well as continued Spanish occupation further south, occasioned dislocations of the coastal tribes, which were compounded by migrations of other tribes into the area. Between 1675 and 1685, tribes that had occupied lands in the vicinity of Charles Town Harbor left, or "were removed" from this area; four of these tribes: the Eitwan, Wando, Sampa, and Seewee had taken up lands along the Wando River, three miles from its mouth. The Seewee continued to move northward, so that by the turn of this century, the tribe occupied territory along the coast below the Santee River (Waddell 1980:4-5).

The state of the coastal tribes became more confused as a result of the migration of tribes into the area just west of their territories beginning with the Westo in the 1660s. English colonists, on their arrival, found the coastal tribes intimidated by the Westo, who were also said to be cannibals. In 1674, Dr. Henry Woodward visited one of the Westo Towns, which were located inland along the Savannah River. Research into the Westo indicates that they were a confederation of several peoples, two of which, the Oustacks and Rickohockans, have been identified in historical sources. The Oustacks were a Timucuan people, originally from Guale, who went north in the late sixteenth or early seventeenth centuries to evade the Spanish and settle in Virginia among the Powhatan confederation. Here, it has been argued, they joined with other groups, including the Pickohockans, an Iroquoian people, and the confederation subsequently drifted south into the Carolinas (Juricek 1964:139, 153, 156, 160-61). The Westo War of 1680 destroyed the control that the Westo had established over the coastal tribes, although the group was still extant and believed dangerous when Thomas Newe visited one of their villages in 1682 (Juricek 1964:160).

In the 1680s, the Savannah, who appear to have come from the vicinity of Augusta, replaced the Westo as a buffer between the English along the coast and the tribes further inland. Notorious slave hunters who preyed on the weaker, coastal peoples, they drifted northward to settle among the Conestoga and Delaware in the vicinity of the Susquehanna River (Milling 1969:86-90). The Yemassee began to move into the buffer zone in the 1690s and remained significant trading partners until they were destroyed in the Yemassee War of 1715-1716.

In the late seventeenth century, the Cherokee appear to have consolidated their control of the Piedmont, forcing the migration of some groups toward the coast. Thus, when John Lawson traveled up the Santee River from the coast, he went first through the settlement of the Seewee, who had settled there from the south and then through the settlement of the Santee, who may have originated in areas much further inland (Waddell 1980:5). Lawson, however, traveled through a long stretch of uninhabited land before he arrived at the Santee village. The villages of the Seewee are not known to have extended further inland than the site of Jamestown, some 25 miles up the Santee from the coast, and the first villages of the Santee appear to have been in the vicinity of the present Lake Marion (Waddell 1981, personal communication).

Linguistic analysis indicates that there were at least two groups present among the coastal tribes: one Siouan and another, hitherto believed Muskogean and now believed to be an as yet unidentified linguistic group. One of the words used to detect the presence of the unidentified language is "Correboo", the name of one of the plantations under investigation. Both the Santee and Seewee were Siouan, and it is possible that members of a tribe associated with the unidentified linguistic group, which concentrated south of the Ashley River, may have come up the Cooper during their winter migrations to the vacant lands between the Seewee and Santee, which is in the vicinity of the present project site (Waddell 1980:33; and personal communication).

The locations given above are usually the known sites of the summer villages. In the fall, the tribes usually divided into smaller groups and moved upstream (Waddell 1980:1). The majority of the tribes depended on agriculture for at least half of their subsistence. Hunting, gathering, and fishing contributed the remainder, although tribes on the lower coast may have depended less upon agriculture than those of the upper coast. European encroachment, wars, disease, the Indian slave trade, and developing commercial ties that undermined the Indians' self-sufficiency disrupted the political, social, and economic traditions of the Mississippian Period.

Early European Settlement, 1521-1663

The earliest known contact with the area now called South Carolina was made by the Spanish in 1521. On an expedition to capture Indian slaves, Quexos, an emissary of Allyon, a higher judge from Hispaniola, landed at the mouth of Winyah Bay. In 1526, Allyon himself arrived with some 500 people to establish a settlement. Early Spanish settlements proved unsuccessful, but their attempts were followed by an effort by Jean Ribaut in 1562. Ribaut landed at Port Royal Sound with 150 Huguenots and attempted to establish a colony there. This enterprise was also short-lived (Petty 1943:17-18).

Spain and France both claimed the territory from Cape Fear south to Florida. Although rivalry between the two imperial powers was fierce, the Spanish dominated in this area until their influence in Europe waned in the early seventeenth century. In 1566, they built a fort on Parris Island, which they abandoned ten years later. The Spanish built a second fort on the same site in 1577, which they also left ten years afterwards (Petty 1943:18).

England's claim to this region was based on the voyages of John Cabot. Sir Robert Heath's attempt to create a refuge for Huguenots in Carolina under the aegis of the English king in 1629 came to nothing. The group landed in Virginia in 1630 (Petty 1943:18). Domestic troubles and the English Civil Wars effectively ended further experiments in colonization until Charles II regained the throne in 1660. Compelled to recognize men who had served him loyally during his exile, Charles II made generous grants in the New World to those courtiers who had participated in his restoration to power. Among these were eight men who obtained the Carolina proprietorship in 1663 (Sirmans 1966:5).

Population of Colonial South Carolina

After preliminary voyages and one unsuccessful effort in 1667, permanent settlement was established in 1670 on the west bank of the Ashley River, across from the present site of Charleston. In 1680, the town was moved across the river to its modern location on the peninsula between the Ashley and Cooper Rivers. Formally named Charles Town, it became the focal point of the growing colony (Petty 1943:19).

Migration to the new colony in the seventeenth century derived from four sources: the English West Indies, especially Jamaica and Barbados; other mainland colonies; the British Isles; and the European Continent, particularly France. M. Eugene Sirmans (1966:4) argued that the migration from Barbados and Jamaica was a critical factor in the early development of South

Carolina. These men brought with them expertise in staple-crop, plantation agriculture based on black and Indian slave labor. The earliest commercial links were with the West Indian ports (Clowse 1971:163-165), and within a decade, the Barbadians, who clustered on Goose Creek, a tributary of the Cooper River, organized themselves into a political faction, whose principal objective was cornering the Indian trade in deerskins and slaves (Sirmans 1966:19).

The political control of the Barbadians was challenged by the Scottish and English Presbyterian migrants who differed from the Anglican Goose Creek men in religion as well as in their place of birth and relative inexperience in colonial life (Sirmans 1966:40-41). Adding to this heterogeneity in background were migrants from New England and New York, attracted to Carolina by its liberal land policies, and Huguenots, who were Protestant refugees mainly from France. Significant French Protestant migration to Carolina began in 1679 when René Petit and Jacob Guérard petitioned Charles II for permission to lead a group of refugee families to the colony. Guérard led the first contingent of 45 families the following year, and as renewed persecutions in France resulted in increased migration of Protestants to England, the Huguenot migration to Carolina swelled (Friedlander 1979:2). By 1700, Huguenots had congregated in five locations: Charles Town itself; Orange Quarter Creek, a tributary of the eastern branch of the Cooper River; the western branch of the Cooper River in what became the Parish of St. John, Berkeley; Goose Creek; and on the south bank of the Santee River in Craven County (Friedlander 1979:3).

Eighteenth century religious wars sent new waves of Protestant refugees to England and her possessions. Swiss Protestants settled Purrysburg in 1732 and New Bordeaux in 1765 (Hirsch 1928:28, 40-41). Those Huguenots who settled in the coastal parishes of the low country, the bulk of whom arrived prior to 1700, became indistinguishable from other colonists during the course of the eighteenth century. Naturalization in 1697 equalized civil status, except for certain restrictions on trade and office-holding that applied to foreign-born but not to their children who were born in the colony. Distinctive Calvinist rituals were first grafted onto the Anglican service and then gradually abandoned, while at least nominally conforming to the Church of England undermined the institutional basis of an independent Huguenot interest. Although a French Protestant congregation continued to meet in Charles Town, its pastor in the critical decades of the early eighteenth century minimized the differences between his service and that of the Anglican Church. The rate of intermarriage between Huguenots and the rest of the population increased steadily until by the fourth generation, which came of age in the era of the American Revolution, a majority of Huguenot descendants married non-Huguenots. During these years, intercolonial and intracolonial migration ended the pattern of partial isolation that had characterized Huguenot settlement at the beginning of the century (Friedlander 1979:169, 221, 238-239, 289-290).

During the early phases of settlement, rivers assumed great importance as arteries for migration. Roads, however, were quickly built, which formed a network linking Charles Town with the inland parishes and then with settlement deeper into the interior (Moore 1979:156). By the close of the colonial period, population had spread over approximately two-thirds of the present

area of the state (Petty 1943:57). The settlement of the backcountry was influenced by a stream of migration from the northern colonies. Although linked to Charles Town as a source of supply and as an outlet for agricultural surplus, this region had more a subsistence economy that produced a smaller surplus than a commercial/market agriculture economy. The coastal parishes, by contrast, invested heavily in staple crops and slaves (Petty 1943:57).

The Economic Development of the Low Country

Building on the experience of Virginia and the West Indian sugar colonies, the proprietors, who owned the colony until 1719-1720, hoped to discover a staple crop whose marketing they would monopolize. The early decades, therefore, saw them encouraging settlers to cultivate cotton, rice, tobacco and flax in addition to desirable exotic items such as olives, grapes and silkworms. Adherents to the complex of ideas that constituted mercantilism, they believed that the colony should produce raw materials that would give the economically more sophisticated mother country a competitive edge in Europe's commerce (Friedlander 1979:75). While the Barbadians who dominated South Carolina in the early years had no quarrel with this essentially agrarian concept, they were unwilling to sacrifice their own short-term gains to the proprietors' long-term advantage. Specifically, trade with the Indians, although serving some of the settlers well, did not meet proprietary goals, since the proprietors had envisioned monopolizing the Indian as well as the white colonists' trade (Friedlander 1975:16). There was little, however, that the proprietors could do about the situation from London.

Between 1670 and 1719, the Indian trade was an important factor in the Carolina economy and was critical in the early decades prior to the introduction of rice in the 1690s. In particular, the trade provided the capital accumulation necessary for agricultural development (Brown 1975:118). Initially, trade in Indian slaves was a significant part of the Indian commerce. After 1715, exchanges of deerskins overshadowed the exchange in Indian slaves, who were rapidly lost in the multitude of black slaves (Friedlander 1975:76). Exports of deerskins retained their primacy until the 1740s, when the same individuals who had controlled the Indian trade concentrated their interests in rice and indigo (Brown 1975:128).

Staple-crop agriculture was consistent with English mercantilist principles of empire (Haywood 1959:16). Introduced in the 1690s, rice was Carolina's first major staple and formed the basis for the plantation system. Overproduction in the 1730s glutted the market and was in part responsible for a decade of depression in the 1740s. Encouraged to diversify, planters began to cultivate indigo. A bounty stimulated production throughout the colonial period and put the Carolina crop at a competitive advantage within the British empire. After Independence, South Carolina indigo, which had always had a relatively poor reputation, lost its advantageous position and encountered serious competition from indigo grown in India. Although it lingered for 20 years, the industry finally collapsed as a result of competition, rising costs of production and a series of natural disasters (Winberry 1979:249-250).

The cultivation of indigo was a labor-intensive process, requiring one hand per 1-4 acres on the average (C.W. 1755:202, DuBose n.d.:76, Eaton 1975:21). In St. Stephen's Parish, the crop was grown, cut and processed into blocks of dye on the plantation (DuBose n.d.:76). The land was cleared and plowed and:

> . . .after all apprehension of frost was over, the fields were laid off in drills about an inch deep, and from twelve to fifteen inches apart from each other. In these drills the seeds, mixed with lime and ashes, were sown. If the season was a fair one, the seeds came up within ten days or a fortnight, and grew off rapidly. The plants were cut three or four times in the season, for making the dye; and during all this period they required nice and frequently repeated hoeing and weeding. When they had grown to the height of two or three feet, the plants were cut with a reaping hook, and carried to the macerating vat. This vat was strongly constructed of thick cypress planks, raised some height above the ground. When this vat, which was called the 'steeper,' was furnished with a sufficient quantity of weed, clear water was poured into it, and the weeds were left to steep or macerate until all the coloring matter was extracted from them; the fluid was then drawn off by means of a faucet into an adjoining vat called the 'beater.' An axle to which were attached arms long enough nearly to reach the opposite sides of the vat, and each furnished with a small bucket at its end, ran lengthwise through the centre of this vat. Laborers would then place themselves upon this vat, and work the axle with handles or cranks, so as to cause the buckets to rise and fall alternately in the liquor. This process was continued until the coloring matter was united in a body. . . .Lime was then applied, which assisted in the separation of the water from the indigo. The whole being now suffered to rest until the blue matter had settled, the clear water was drawn off by cocks in the sides at different heights, and the blue part discharged by a cock in the bottom into another vat. It was then strained through cloth bags, and spread out in shallow vessels called 'bowls,' to harden and dry (DuBose n.d.:75-76).

The dried material was cut into blocks of about one-fourth pound each and shipped to market in bags or boxes (DuBose n.d.:76).

Rice, which had supported the colonial economy, was still cultivated after the Revolution, but the manner of cultivation changed. In the early eighteenth century, it was grown in inland swamp regions by damming ponds and flooding the fields in preparation for planting. In 1731, rice planting in South Carolina was described as follows:

> In <u>March</u> and <u>April</u> it is sown in shallow Trenches made by the Hough, and good Crops have been made without any further Culture than dropping Seeds on the bare Ground and covering it with Earth, or in little Holes made to receive it without further Management. It agrees best with a rich and moist Soil, which is usually two Feet under Water, at least two Months in the Year. It requires several Weedings till it is

> upward of two Feet high, not only with a Hough, but with the Assistance of Fingers. About the middle of September it is cut down and housed, or made into Stacks till it is thresh'd, with Flails, or trod out by Horses or Cattle; then to get off the outer Coast or Husk, they use a Hand-Mill, yet there remains an inner Film which clouds the Brightness of the Grain, to get off which it is beat in large wooden Mortars, and Pestles of the same, by Negro Slaves, which is very laborious and tedious (As quoted in Rasmussen 1975:160-161).

Gideon Dupont is credited with initiating the change to tidal culture in 1783. There is evidence, however, that methods taking advantage of the effect of the tides on rivers and swamps in order to flood the rice fields were in use prior to the 1780s. Flooding the fields killed the weeds but not the rice plants, thus obviating the need for repeated hoeing and lessening the intensity of labor required to cultivate rice. Rice in nineteenth century South Carolina, according to Frederick Law Olmstead in 1853:

> . . .continues to be cultivated extensively on the coast of Georgia and the Carolinas. . .only because there are unusual facilities there for forming plantations in which, while the soil is exceedingly rich and easily tilled, and the climate favorable, the ground may be covered at will with water, until nearly all other plants are killed, so as to save much of the labor which would otherwise be necessary in the cultivation of the crop; and which may as readily be drained, when the requirements of the rice itself make it desirable (as quoted in Rasmussen 1975:815-816).

Clarence Ver Steeg (1975:120) has argued that naval stores were the basis for the development of plantation culture and slavery in the early eighteenth century in South Carolina. Mr. George Terry, Curator, Historical Collections, McKissick Museum, has graciously supplied parts of the draft of his yet unpublished study of the Parish of St. John, Berkeley in the eighteenth century. In this study, he disputes Ver Steeg's finding, arguing that his conclusions rest on faulty reading of rice export statistics, although he would not deny that production of naval stores was a significant feature of the colonial economy (Terry 1981:II:26-31). Forest industries, in both Georgia and South Carolina, "figured importantly as a wintertime activity that created year-round labor for the slaves and servants, provided a source of supplementary income, and cleared land for agricultural expansion" (Herndon 1979:131-132). Few planters, especially those in newly settled parishes, were so well-fixed that they could afford to allow their slaves to be idle and to ignore the profits of their woodlands.

St. Stephen's Parish

The Indian trade stimulated endemic warfare among the tribes, and constant abuses by the whites resulted in Indian wars against the Europeans (Friedlander 1975:39). The Yamassee War of 1715-1716 devastated the colony, and

subsequent mishandling by the Proprietors provided the imperial government the opportunity to obtain control of the colony in 1719-1720 (Sirmans 1966:129). At this time, North Carolina and South Carolina were formally separated; other agencies of local government, i.e., the parish and the assembly, were left intact.

The primary unit of local government was the parish (Figure 3). In 1682, the vicinity of the Ashley and Cooper Rivers was divided into three counties: Berkeley, Craven and Colleton (Archives News 1968(69):154). These divisions, however, did not assume administrative importance. Despite official toleration of non-Anglicans, the ten Anglican parishes established in 1708 were units of social, civil, political and religious importance (Hannum 1970:40). The vestrymen and churchwardens were men of local influence. They hired the minister, supervised maintenance of roads and schools, and assessed taxes for the care of the poor (Boucher 1948:1). The parish also served as the election district for representation in the Commons House of Assembly, the colony representative body after 1716 (Hannum 1970:55). As the colony grew, additional parishes were surveyed, responding to a diffusion of population into the interior and to shifts in population density. Thus, the area known in the early eighteenth century as English Santee, a part of the Parish of St. James, Santee, was incorporated as the Parish of St. Stephen in 1754 as a result of movement into the area during the preceding decades (Misenhelter 1977:1).

For most of the eighteenth century, swamplands and river lands were desired as avenues to wealth. The population in the coastal parishes spread out along a network of swamps that intertwined among the rivers. People in St. John's, Berkeley, and St. James, Santee, followed the swamps that spread along the Cooper and Santee Rivers (e.g., Hell Hole Swamp, Ferguson's Swamp, Wiskinboo Swamp, Half Way Swamp, Santee River Swamp, Fair Forest Swamp), gradually filling in the area called English Santee, subsequently called St. Stephen's (Orvin 1973:5). With swamplands suited for rice and higher land for indigo, the parish prospered (Figure 4).

The Parish of St. Stephen was very like the two neighboring parishes that had influenced its settlement: St. James, Santee, and St. John's, Berkeley. Descendants of Huguenot migrants were prominent in parish government in the latter eighteenth century, and St. Stephen's reliance upon plantation staples was very like the economy of the two adjoining parishes. The Huguenots who resided in St. Stephen's were the grandsons and great-grandsons of men who had settled in Santee; St. John's, Berkeley; and Orange Quarter. Like other members of the colonial elite, leading planters dominated parish affairs, and in this parish, many leading planters were descendants of Huguenot migrants. In St. John's, Berkeley, the early eighteenth century witnessed the emergence of kinship networks within the parish, and in St. Stephen's, a similar phenomenon developed. An analysis of the seven member vestry between 1754 and 1770 indicates that in 13 of the 17 years, a majority of the members of the vestry were Huguenots. In 14 of the 17 terms for which the membership is known, more than half of the Huguenot members were kindred (Friedlander 1979:285-286).

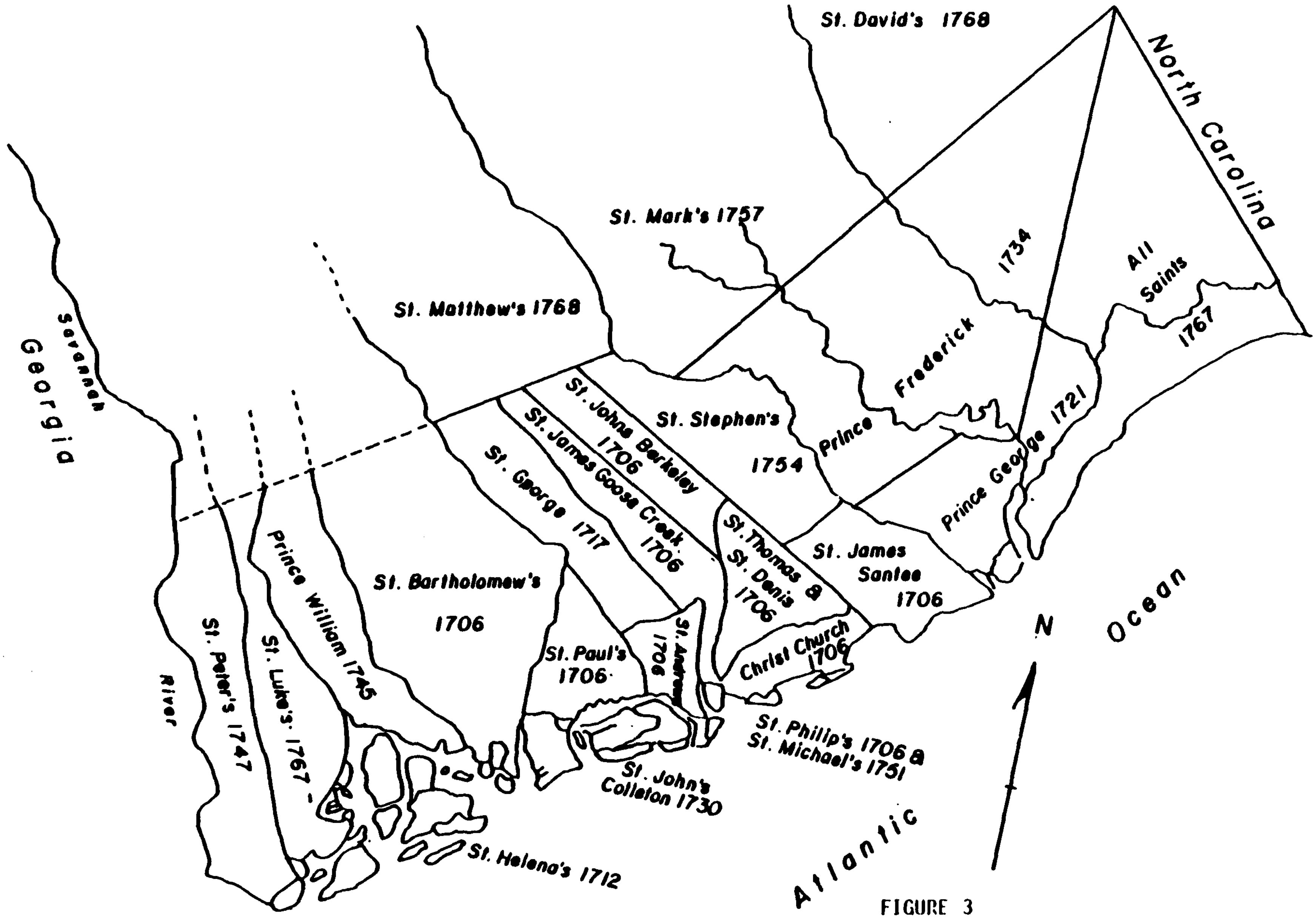
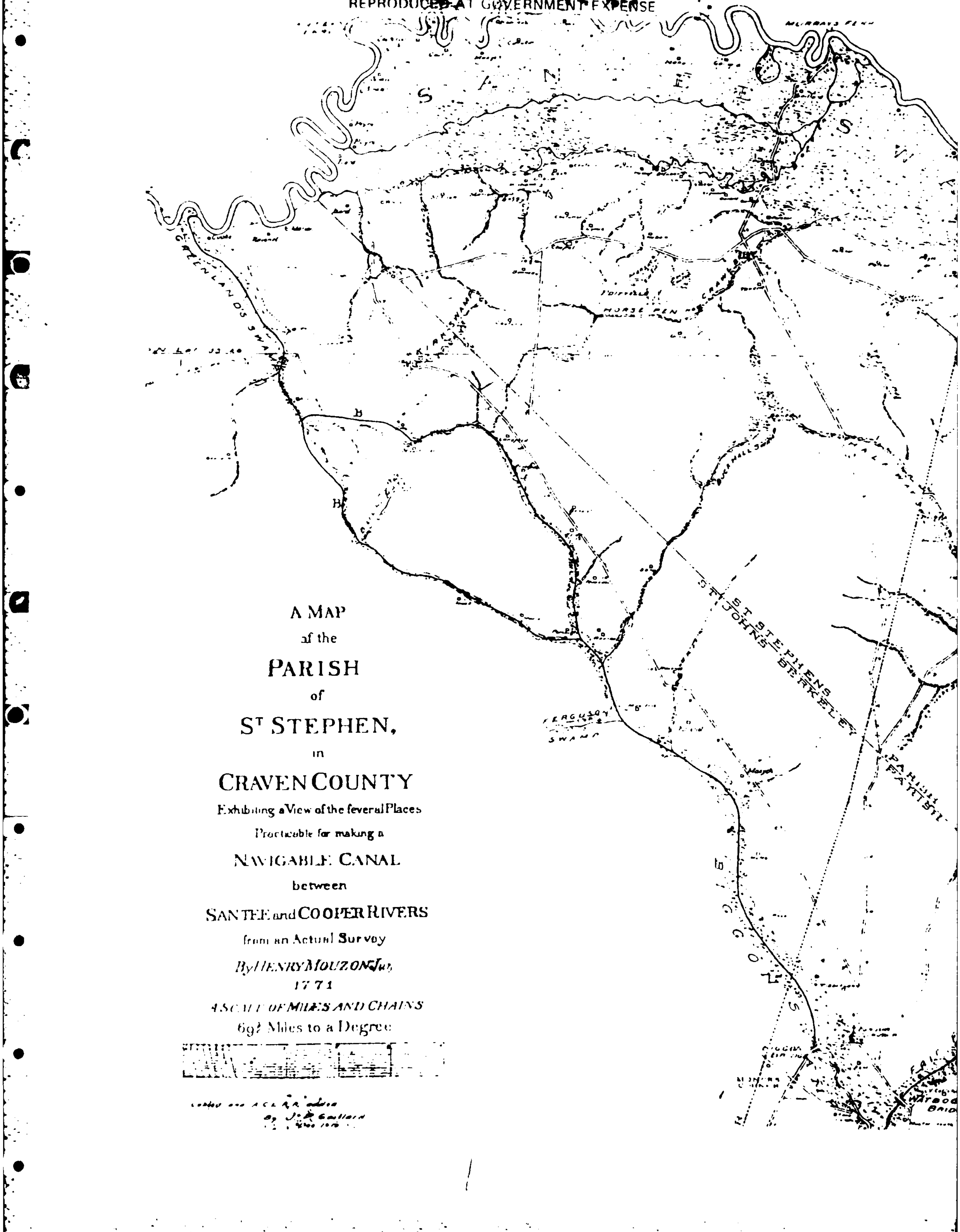
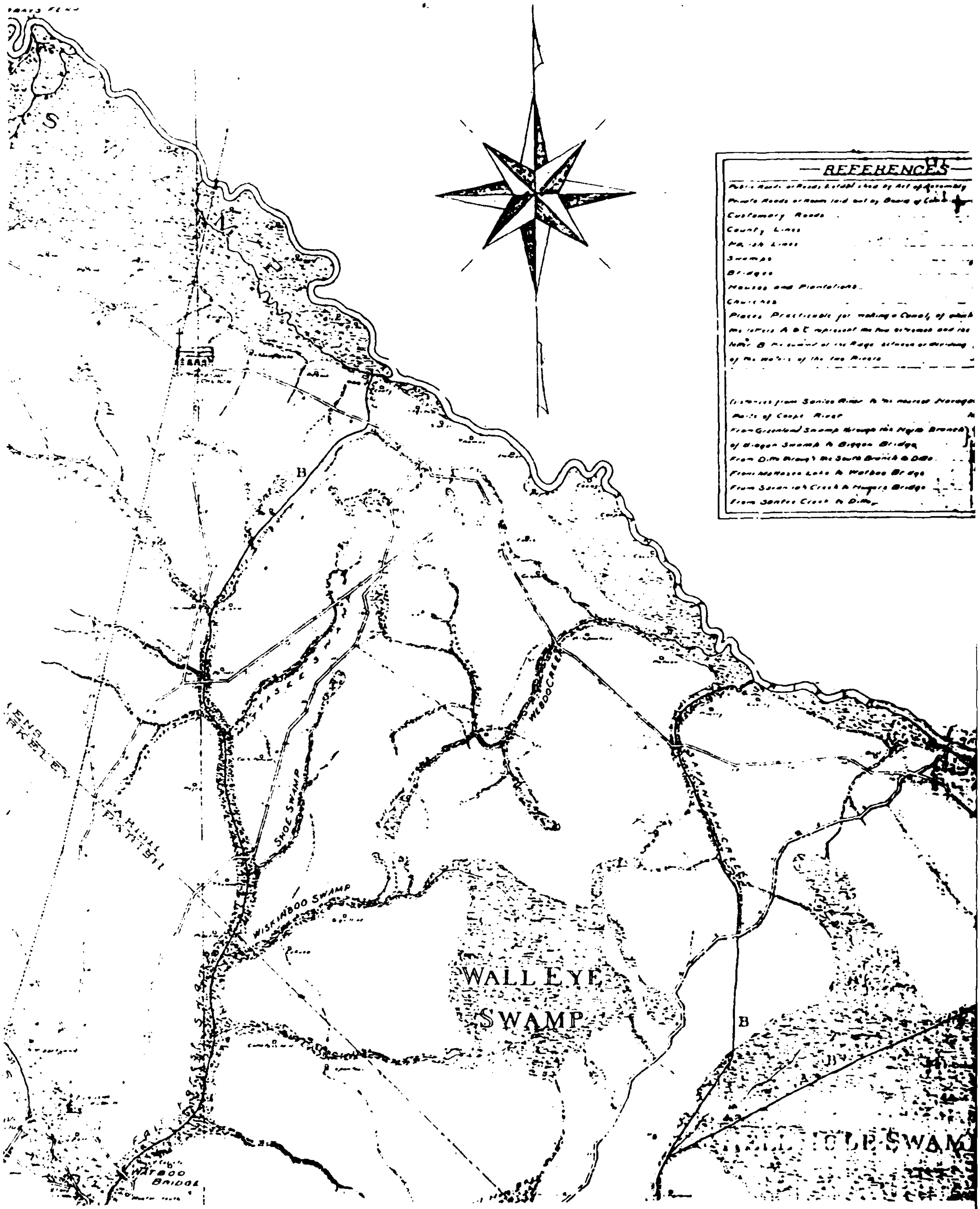


FIGURE 3
Parishes of South Carolina, 1770
(From Historical Records Survey, W.P.A., 1938)


S A N T E E
HORSE PEN
FERGUSON
SWAMP
ST STEPHENS
ST JOHNS BERKELEY
PARISH
PARISH
A MAP
of the
PARISH
of
ST STEPHEN,
in
CRAVEN COUNTY
Exhibiting a View of the feveral Places
Practicable for making a
NAVIGABLE CANAL
between
SANTEE and COOPER RIVERS
from an Actual Survey
By HENRY MOUZON Jun.
1771
A SCALE OF MILES AND CHAINS
69½ Miles to a Degree


REFERENCES
Customary Roads
County Lines
Parish Lines
Swamps
Bridges
Houses and Plantations
Churches
Places Practicable for making a Canal
WISKINBOO SWAMP
SHOE SWAMP
WALL EYE
SWAMP
WATBOO
BRIDGE

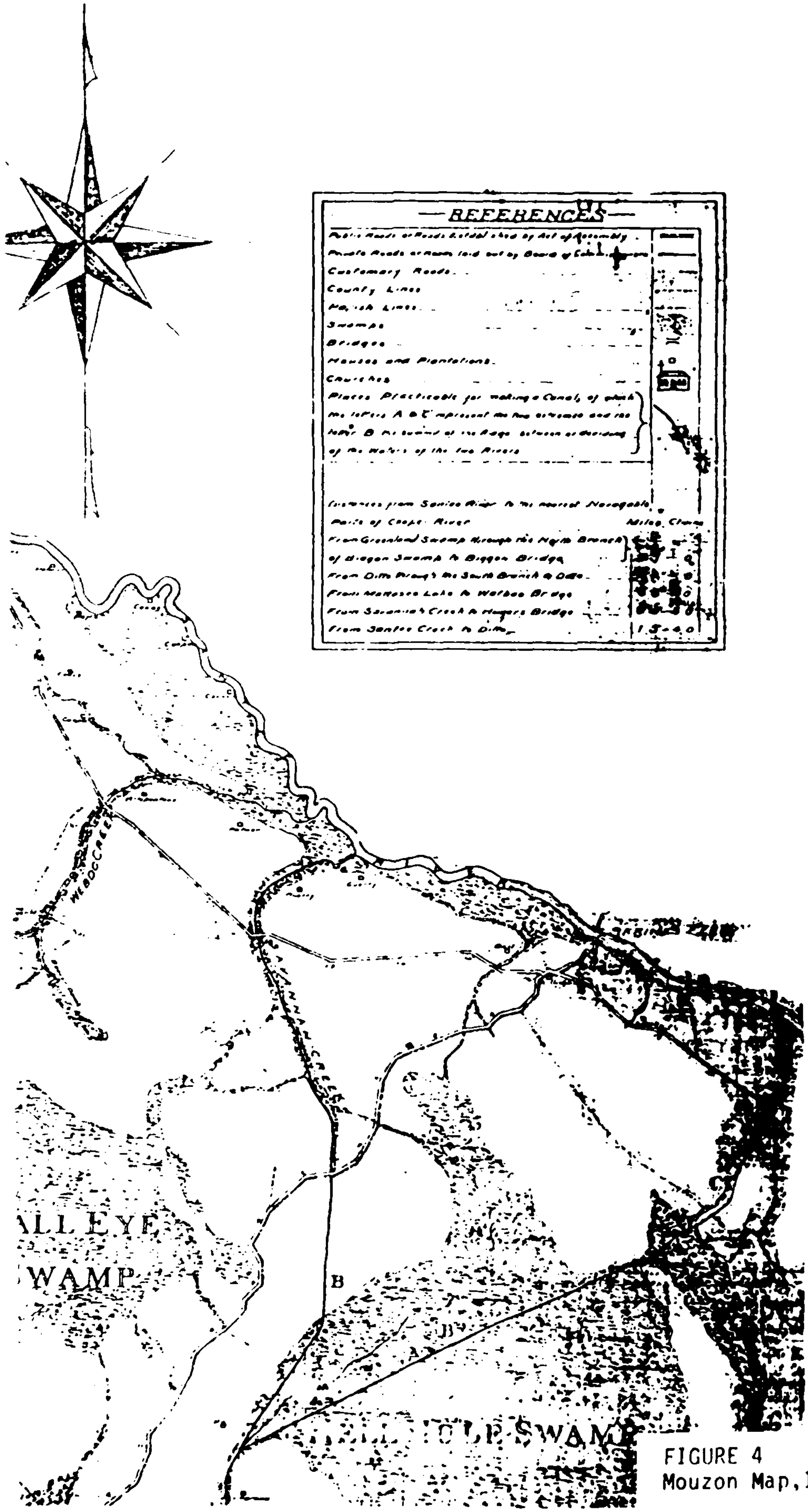


FIGURE 4
Mouzon Map,1771

Although rice and indigo supported the colonial South Carolina plantation system, the prevalence of this model has been overestimated. George Terry's research on the Parish of St. John, Berkeley, shows that particularly in the early stages (i.e., the late seventeenth and early eighteenth centuries), the economic organization in the parish "defies any simple description" (Terry 1981:II:37). Individual planters experimented with everything "from cotton to hemp" and planters had sizable investments in corn, cattle and naval stores in addition to rice (Terry 1981:II:35-36). In the interests of protecting the integrity of their families, Terry argues, planters in the early eighteenth century acquired land outside the parish limits on which they envisioned settling their children, moving, he states, generally in the direction of the Santee River (Terry 1981:II:38). Terry's preliminary conclusions are consistent with other detailed studies of the low country in the region involving the Cooper and the Santee Rivers, and suggest clearly that the kinship network evident in St. Stephen's Parish was the natural evolution from patterns evident in neighboring St. John's, Berkeley. The geographical direction was influenced by the needs of South Carolina's plantation economy and resources of the forest.

The War for Independence substantially altered the economics of St. Stephen's. Although planters continued to work with indigo, they began to make the transition to cotton culture, facilitated in the 1790s by the invention of the cotton gin and the completion of the Santee Canal. Neglect, slave confiscations and dislocations caused by the war had a deleterious effect on the economy of the parish. At the beginning of the Revolution, Peter Gailliard of St. Stephen's Parish inherited a good indigo plantation in the parish; ten years after the war, he could not make ends meet. Around 1790, Samuel Cordes abandoned Milford, for which he had paid 6000 guineas before the Revolution. Gailliard purchased The Rocks, a plantation in Upper St. John's, Berkeley, above St. Stephen's, where he successfully cultivated cotton after 1796. By 1800, he was out of debt, and when he died he left each of his five sons a plantation and each of his three daughters a townhouse, in addition to the comfortable fortune which had seen him through his old age in comfort (Stoney 1938:39). Building the Santee River Canal had provided limited financial relief for Santee River planters whose slaves were employed by the project between 1792 and 1800. By the opening of the canal, enough acreage was in cotton to make the crop one of the significant items carried along it (Orvin 1973:148-149).

Although cotton proved a godsend for Upper St. John's, Berkeley, and for the upper part of St. Stephen's Parish, particularly the vicinity of Pineville, which was founded in 1794, the parish as a whole suffered from the war and from a rapid succession of freshets in the late eighteenth and early nineteenth centuries. In 1826, Robert Mills commented:

> At present there are many waste old fields, both high lands, and river swamp, which, thirty years ago, were in the highest state of cultivation, producing luxuriant crops of corn, indigo, and rice. This melancholy reverse is the effect of freshets, no measures being taken to bank in the river lands from the flood.

> These lands are uncommonly fertile, and were successfully cultivated till the year 1784. From that year to 1795, very little was raised near the Santee. Many of the planters, discouraged by a rapid succession of freshets, abandoned the plantations subject to their influence. Since 1796, the freshets have diminished in frequency and height; and the planters have recommenced there the culture of corn, rice, and cotton (Mills 1826:482).

Plantation records describing the holdings of Thomas Porcher and Thomas Walter Peyre do show these men holding several tracts that had been eighteenth century plantations consolidated into larger units. Known by their eighteenth century names, they were planted in corn, cotton, peas and oats (Thomas Porcher, Diary, 1822-1824, SCHS; Thomas Walter Peyre, Journal, 1834-1850, SCHS).

Mill's optimism was, however, premature. The Santee River canal became expensive to maintain, although the construction of the North Eastern Rail Road compensated for the loss of the canal as an outlet (Orvin 1973:153-154). Pineville suffered a series of epidemics between 1833 and 1836, which resulted in temporary depopulation; its academy did not reopen until 1842 (Orvin 1973:158-159). Finally, cotton cultivated in coastal Carolina was overshadowed by the tremendous profitability of the Piedmont and then the Gulf States, particularly Alabama, Mississippi and eastern Texas.

South Carolina and Cotton Production, 1800-1860

"Upland" (gray and green seed) cotton was introduced as early as 1733 and spread rapidly around 1800 as a result of the demand created by the industrial revolution, the exploitation of black labor and the invention of the cotton gin. Eli Whitney's gin, however, was more significant in the spread of green seed cotton, and hence to the development of the Piedmont and the Gulf states, than to changes in the coastal regions, since black and gray seed cotton, the varieties grown in the east, were already effectively cleaned through a gin that antedated Whitney's machine (Brasington 1977:14-15). In the first 20 years of the nineteenth century, South Carolina "began to enjoy something of a monopoly in cotton production" so that by 1825, "cotton had pushed almost everything except articles for home consumption into the background" (Whartenby 1977:21-22). The price of cotton fell in 1819 and remained low through the 1820s. During these less prosperous years, Alabama and Mississippi entered the Union, and the cotton planters in these states "could make profits at prices which would bankrupt many of the South Carolina planters" (Whartenby 1977:23).

Between 1801 and 1811, the production of cotton in the inland coastal parishes more than doubled. Between 1811 and 1821, production increased by 24 percent, but the national statistic, affected by the production in the Piedmont and settled parts of Alabama and Mississippi, showed an increase of 121 percent. In the years from 1821 to 1839, the production of the inland coastal parishes <u>decreased</u> by 25 percent. South Carolina's total production

also fell by 10 percent in this period, although national production increased by 123 percent. In the 1840s, South Carolina's production improved, growing by 87 percent; the coastal parishes increased production by 210 percent in this decade. National production increased only 25 percent in the 1840s. The forties were a decade of depressed prices, but the fifties were flush. In the decade preceding the Civil War, national production again went up by 140 percent; the inland parishes increased their yields by 60 percent, and the state's production went up only 18 percent (Brasington 1977:20-21).

One of the ways in which the inner coastal plain retained its profitability in cotton was through the early use of fertilizers and the consolidation of farms into larger plantations (Brasington 1977:18). This resulted in the displacement of small farmers by larger property holders. The migration from the Seaboard to the Gulf states was dominated by small farmers who did not own slaves; slaveholders followed. The small farmer, James D. Foust concludes, "does not appear to have been pushed out of the better lands in the Southwest. In fact, more 'pushing out' appears to have occurred in the older southeastern regions" (Foust 1975:171). Thus, although the inland coastal region continued to engage profitably in cotton agriculture in the six decades prior to the Civil War, it declined relative to the rest of the South and its limited prosperity took place at the expense of smaller operations. Sadly and with some bitterness, James Hammond told the Agricultural Society of South Carolina in May 1842:

> . . .the cotton growers of South Carolina need not look abroad for competition. It is much nearer home. It is our own kith and kin. . .that have levelled the gigantic forests of the south and southwest, and furrowed the rich bottoms through which pour the tributaries of the Gulf of Mexico, from the Suwanee to the Sabine, and that have but recently rescued from a slothful race the fertile empire stretching beyond the Sabine to the Rio Grande -- who are destined at no distant day, to supply the foreign markets of the world with this inestimable staple. . .so soon as the check on consumption shall place in strict competition all the cotton growers of the world, and reduce prices to their lowerst point, the cultivation of this staple must be confined almost entirely to these fertile regions (as quoted in Rasmussen 1975:711-712).

In the meantime, observers of St. Stephen's and the older settlements along the lower Santee in the late antebellum period saw decayed grandeur. "He who travels in winter from the bank of the Santee Canal" [i.e., down the Santee through St. Stephen's], wrote Fredrick Porcher, "will find himself in an almost uninterrupted forest of pine. On his left lie the mysterious depths of the Santee Swamp, whose soil once teeming with the rewards of industry, is now abandoned to the hand of nature. . . ." (Porcher 1852:93). Continuing along the river, Porcher described past and present evidence of making tar, and arriving at the parish church, he commented:

> The church tells a story of former grandeur and of present desolation; though not large, it indicates a respectable congregation; it is finished with neatness, with some pretensions even to elegance, and the beholder involuntarily mourns over the ruin to which it is doomed (Porcher 1852:95).

Dr. Samuel DuBose also pondered the question of the decay of St. Stephen's in the 1850s, remembering the parish in his childhood as having been "the garden spot of South Carolina" (DuBose n.d.:37). Reflecting on first the church and then the vacant plantation houses, he commented:

> Silence is becoming there [in the graveyard]; it is what we naturally expect. But here, in the abiding-place of men, where was once the din of busy life, we have now the silence of death, and more than its gloom. For these walls were meant for the living, but now no living soul dwells within them (DuBose n.d.:85).

He exaggerated the extent of depopulation since federal censuses continued to enumerate people in the parish (Table 1 and Table 2). The population was for the most part concentrated in the upper end of the parish, particularly in Pineville, which became a retreat for planters and their families, populated year-round by a clergyman, doctor, storekeeper and an assortment of widows and spinsters (Brewster 1947:44).

Slavery in South Carolina

The most influential migrants in the 1670s were a group of Barbadians who migrated to the American mainland because of a growing scarcity of land in the islands. With them, they brought familiarity with plantation management, staple-crop agriculture, and slavery. Eleven percent of the households that arrived in Charles Town between 1670 and 1680 included slaves (Friedlander 1979:100-102). Early settlers in the colony, however, evidently expected to enslave the native population, and the reports back to the proprietors in England were soon filled with accounts of exploiting and enslaving the Indian tribes. The Westo War of 1684 effectively decimated the most powerful of the coastal tribes in the area, and the Yemassee War of 1715-1716 broke the back of this powerful group, which had acted as a buffer between the European population along the coast and the more powerful tribes of the interior.

The Indian trade involved traffic in slaves as well as skins and furs. Slaves were generally captives taken as a result of inter-tribal warfare, which the traders did their best to incite. Indian slaves were re-shipped to other colonies on the mainland or in the West Indies as well as kept in South Carolina. Because of the ease with which they could escape and the threat they represented, the colonial government tended to encourage the exportation of Indian slaves. As measured by the proportion of the slave population, the Indian presence peaked by 1710 and was quickly overshadowed by the enormous influx of Africans after 1710 (Table 3). Recent estimates developed by Philip Morgan (1977:284) indicate that the average number of African slaves

TABLE 1. Population of South Carolina and St. Stephen's Parish, 1790-1850

	South Carolina							St. Stephen's Parish						
Year	Total	%	White	%	Black	%	Ratio*	Total	%	White	%	Black	%	Ratio*
1790	249,073	100.0	141,979	57.0	107,094	43.0	1:.75	2733	100.0	227	8.3	2506	91.7	1:11
1800	345,591	100.0	196,255	56.8	149,336	43.2	1:.76	2512	100.0	330	13.1	2182	86.9	1:7
1810	415,115	100.0	218,750	52.7	196,365	47.3	1:.9	[2553]**	100.0	[372]	14.6	[2174]	85.2	1:6
1820	502,741	100.0	244,266	48.6	258,475	51.4	1:1	[2503]	100.0	[427]	17.1	[2063]	82.4	1:5
1830	581,185	100.0	265,784	45.7	315,401	54.3	1:1.2	2416	100.0	602	25.0	1814	75.0	1:3
1840	594,398	100.0	267,360	45.0	327,038	55.0	1:1.2	2453	100.0	481	19.6	1972	80.4	1:4
1850	668,507	100.0	274,563	41.0	393,944	59.0	1:1.4	2854	100.0	689	24.1	2165	75.9	1:3

* Ratio, whites to blacks.
** Brackets indicate estimates based on trend-line analysis.

Sources:
U.S. Census of Population: 1960. I, pp. 42-22.
Ms. Census, 1840, Charleston District, St. Stephen's Parish.
Ms. Census, 1850, Charleston District, St. Stephen's Parish.
U.S. Census: 1790. South Carolina, p. 8.
Return of the Whole Number of Persons (1800), pp. 2-3.
Census for 1820.
Fifth Census (1830), pp. 94-95.
Compendium of the Sixth Census (1840), pp. 47, 367.

TABLE 2. Population of South Carolina, Berkeley County and St. Stephen, 1890-1970

	South Carolina		Berkeley County		St. Stephen	
Year	Total	% Increase	Total	% Increase	Total	% Increase
1890	1,151,149	15.6*	55,428	---	230	---
1900	1,340,316	16.4	30,454+	-45.0	256	11.3
1910	1,515,400	13.1	23,487+	-22.9	408	59.4
1920	1,683,724	11.1	22,558	- 3.9	[546]**	33.8
1930	1,738,765	3.3	22,236	- 1.4	[616]	12.8
1940	1,899,804	9.3	27,128	22.0	1185	92.4
1950	2,117,027	11.4	30,251	11.5	1341	13.2
1960	2,382,594	12.5	38,196	26.3	1462	9.0
1970	2,590,516	8.7	56,199	47.1	1506	3.0

* Population of state in 1880 was 995,577; Berkeley County was organized in 1882.

** Brackets indicate estimates based on trend-line analyses.

\+ Portions of Berkeley County were annexed to Charleston, Orangeburgh and Dorchester Counties between 1890 and 1910.

Sources:
U.S. Census of Population: 1900, I, p. 555.
U.S. Census of Population: 1910, III, p. 643.
U.S. Census of Population: 1920, III, p. 929.
U.S. Census of Population: 1930, III, pp. 784, 806
U.S. Census of Population: 1940, II, pp. 376, 420, 346.
U.S. Census of Population: 1950, II, Pt. 40, pp. 40-9, 40-74, 40-65, 40-26.
U.S. Census of Population: 1960, I, Pt. 42, pp. 42-9, 42-45, 42-74, 42-22.
U.S. Census of Population: 1970, I, Pt. 42, pp. 42-7, 42-12, 42-41, 42-89.

TABLE 3. South Carolina Slave Population, 1703-1724

Year	Total	Black	% of Total	Indian	% of Total
1703	3350	3000	89.6	350	10.4
1708	5500	4100	74.5	1400	25.5
1710	[6740]	5500	81.6	[1240]	19.4
1715	12350	10500	85.0	1850	15.0
1720	13888	11828	85.2	2060	14.8
1724	[16554]	[14454]	87.3	2100	12.7

*Brackets indicate estimates based on trend line analyses

Sources: Records in the British Public Record Office V:203
Clowse 1973:252
Greene and Harrington 1932:172-73

imported into South Carolina per year in the period 1706-1709 more than tripled in the period 1710-1714. The average number of imported slaves continued to grow, reaching a peak of 2370 in the period 1735-1739.

By 1710, slaves outnumbered free people in South Carolina. Peter Wood (1974:274) has argued that after 1720, living in the presence of a black majority engendered a white mind-set anxious about incipient rebellion and simultaneously defensive in matters relating to the question of loyalty of slaves to their masters. Research by George Terry (1981) in St. John's, Berkeley, and Philip Morgan (1977) on the evolution of plantation slavery in Virginia and South Carolina in the eighteenth century has detailed with some precision the extent of the black majority and the significance that this had upon the nature of South Carolina society in the colonial period.

Morgan (1977:1) found that in the 1730s slaves tended to become concentrated on larger plantations; half of the colony's slaves lived on plantations with 20 to 50 slaves. Although a small increase in the size of the slave population was apparently due to natural causes in the early eighteenth century, the enormous growth due to importation between 1715 and 1739 and again in the 1750s more than accounted for the increase in the slave population. Population growth due to natural increase was not again evident until the 1760s (Morgan 1977:288). By 1790, in the Santee region, which included St. Stephen's Parish, three-fourths of the slaves were resident on large plantations (Morgan 1977::1). Dealing more specifically with society in the Parish of St. John, Berkeley, Terry (1981:III:1) has found that a "scarcity of white population" was "one of the most distinctive features" of the parish. He believes that the average ratio of blacks to whites was 15:1 during the eighteenth century (Terry 1981:IV:15). At the close of the eighteenth century, Morgan (1977:7) argues that on the large plantations, which housed three-fourths of the parish's slaves, the ratio of slaves to whites was 27:1.

The numbers themselves are less important than their significance relative to black culture. The exaggerated imbalance meant that slaves were in less frequent contact with whites and hence less likely to be in a position to graft colonial, white customs onto their own practices. Although Terry (1981:IV:2) estimates that the white population in the parish never exceeded 600 during the eighteenth century, the black population, in contrast, grew to nearly 4000 in the same period. Blacks, particularly in the outlying plantations owned by families that held several plantations, were more likely to have been left on their own. Although plantations wholly composed of slaves were the exception rather than the rule, Terry (1981:IV:15-18) uncovered sufficient evidence to demonstrate limited black autonomy within the plantations in St. John's, Berkeley, and a surprising amount of individual mobility on a regular basis within the parish, into the adjoining parishes of St. Thomas and St. Denis, and along the Cooper River.

Census data for St. Stephen's Parish begins in 1790, although that census was not a definitive enumeration. Census data collection improved with time, and the censuses of 1840 and 1850, particularly the enumerators' manuscript reports, are more reliable. Table 2 summarizes census data for South Carolina and St. Stephen's Parish from 1790 to 1850, with emphasis on the relationship between the white and black populations.

On a state-wide basis, the balance between blacks and whites had reversed from its colonial trend in 1790. Reflecting, however, the extension of plantation slavery into the Piedmont as a result of cotton cultivation, the ratio of blacks to whites reverted toward its colonial arrangement in the first decades of the nineteenth century. By no means, though, did antebellum South Carolina's population resemble the extreme racial imbalance of the early eighteenth century colony. Because St. Stephen's had been an eighteenth century plantation parish, with an extremely high concentration of large plantations, the ratio of blacks to whites was higher in 1790 than for the state as a whole. Over the course of the first five decades of the nineteenth century, this ratio tended to approach the state statistics, but reflecting the investment in plantation agriculture over smaller farms, the ratio of blacks to whites in St. Stephen's was consistently higher than the state's ratio.

Table III-4 suggests at least one reason for the decrease in the racial imbalance in the parish. Clearly, except for the decade of the 1830s, white population grew more rapidly than black. Through the 1830s, there was a consistent decline in the black population in the parish, which was probably the result of the movement of plantation agriculture into the Piedmont. White depopulation of the parish, characteristic of the 1830s and consistent with contemporary remarks about the state of the parish (see preceding section), reversed itself in the 1840s. By the 1850s, the populations of both groups were growing. Because both groups grew, the imbalance stabilized at between 4:1 and 3:1 and never became as extreme as it had been in the previous century. Consequently, contact between whites and blacks in the first five decades of the nineteenth century in St. Stephen's can be assumed to have been more frequent, and the demographic conditions conducive to black autonomy in the colonial period weakened in the nineteenth century.

Ownership of Slaves

Scholars have estimated that at the close of the colonial period, between one-half and three-fourths of eastern South Carolina's white population held slaves (Main 1966:65; Jones 1980:13). The most recent study of wealth distribution at the conclusion of the colonial period by Alice Jones (1980:13) finds, however, that in 1774 "a few of them held large numbers of slaves". Philip Morgan (1977:7) has argued that in 1790 in parishes consisting almost entirely of large plantations, such as St. Paul's and St. John's, Colleton, only 5 percent of the households did not report any slaves and "only in the large parishes of Prince George's and Prince Frederick's to the north were about one-half of the households without slaves". The two northern parishes were toward the colonial frontier, and real estate was more equitably distributed than in the coastal plantation parishes. In the latter eighteenth century in South Carolina, therefore, mere ownership of a slave was within the economic grasp of at least half of the population. Although owning slaves was fairly widespread within the white population, owning large numbers of slaves was restricted to an elite. Slaves constituted about 90 percent of the total population of St. Stephen's Parish in 1790, and therefore, when historians discuss the major colonial slaveholders, meaning that upper 30 percent of slaveholders (or 3 percent of the total population) who owned 26 or more slaves in 1774 (Jones 1980:119), they are truly describing the elite of the elite.

TABLE 4. Population Growth, St. Stephen's Parish
1790-1850

Year	White	% Increase	Black	% Increase
1790	227	---	2506	---
1800	330	+45.0	2182	-12.9
1810	[372]*	[+12.7]	[2174]	[-.37]
1820	[427]	[+14.7]	[2063]	[-5.1]
1830	602	+41.0	1814	-12.1
1840	481	-20.0	1972	+8.7
1850	689	+43.2	2165	+9.9

* Brackets indicate estimates based on trend-line analysis.

Sources: Ms. Census, 1840, Charleston District, St. Stephen's Parish.
Ms. Census, 1850, Charleston District, St. Stephen's Parish.
U.S. Census: 1790, South Carolina, p. 8.
Return of the Whole Number of Persons (1800), pp 2-3.
Census for 1820.
Fifth Census (1830), pp. 94-95.
Compendium of the Sixth Census (1840), p. 367.

Morgan (1977:6-7) has shown that the South Carolina slave population tended to become concentrated on large plantations during the colonial period. Since slaves continued to be imported throughout the colonial period, this did not affect the distribution of slave ownership within the white population. After 1808, the transatlantic slave trade closed, and growth of the black population was the product of changes in life expectancy and fertility. A more limited supply might be expected to accelerate the concentration of slaves in the hands of fewer masters so that ownership of slaves would be less widespread in the white population.

The scholarly literature shows that slave ownership did become more restricted, but also demonstrates variation within the region of individual states. Based on the printed 1860 census, Kenneth Stampp (1956:31) found that nearly three-fourths of the white population did not own any slaves at all. This differed from state to state. In South Carolina and Mississippi, about one-half of the families reported slaves. In Georgia, two-fifths of the households owned slaves, and the proportion declined to one-thirtieth in Delaware. Large slaveholdings were more numerous in the Lower South than in the Upper South, and "concentrations of the southern plantation could be found in the sugar parishes of Louisiana, in the Yazoo Basin, and around Natchez in Mississippi, in the Black Belt of Alabama, and in the rice swamps and sea islands of South Carolina and Georgia" (Stampp 1956:31). Almost 50 percent of the slaveholders held less than five slaves, 72 percent owned less than ten, and 88 percent had less than 20 slaves, the benchmark in the antebellum decades for large holdings. The "typical" planter, according to Stampp, worked between 20 and 50 slaves, and the aristocracy consisted of some 10,000 families who owned between 20 and 50 slaves. "The extremely wealthy families who owned more than a hundred slaves number less than 3000 in a total of 1,516,000 free families, a tiny fraction of the southern population (Stampp 1956:30-31)".

The plantation culture that had been geographically confined for the greater part of the colonial period had thus diffused across the South during the years from 1790 to 1860. Society was not static, and Gavin Wright's studies, based on the manuscript censuses for 1850 and 1860, show that the 1850s had seen some shifts in slave ownership. Wright (1970:81) found that the social segment just below the very top, "the second, third, and sometime fourth deciles" gained at the expense of both the richest and poorest members of Southern society in the decade preceding the Civil War. He concludes that "the small farmer was not so much being squeezed off his land as losing his share of the slaves. These two factors -- the rise of slave prices and the shift of slaveownership away from small farmers toward middle-class farmers -- resulted in an increase in the concentration of wealth for the cotton South as a whole".

Analysis of the manuscript census for the Parish of St. Stephen for 1840, 1850, and 1860 exemplifies the generalizations outlined by both Wright and Stampp (Table 5, a-c). Wright's argument implies that the distribution Stampp summarized evolved from a broader distribution of slave ownership in the earlier decades. Between 1840 and 1860, the percentage of white households in St. Stephen's reporting slaves did decline, although the increase in 1850 probably reflects the parish's relative prosperity in that decade, despite economic decline in most of the cotton South in the 1840s.

TABLE 5a. Frequency Distribution, Slave Ownership, St. Stephen's Parish, 1840

Interval	Number	Percent	Cumulative	% of Slaveholding	Cumulative
0	57	60.6	60.6		
1-4	0	0	60.6		
5-9	5	5.3	65.9	13.5	13.5
10-19	11	11.7	77.6	29.7	43.2
20-50	9	9.6	87.2	24.3	67.5
51-100	6	6.4	93.6	16.2	83.7
100+	6	6.4	100.0	16.2	99.9*
Total	37				

Range, 0-260 Mean Slaveholding = 53.4

*Error due to rounding

Source: Ms. U.S. Census: 1840, South Carolina, Vol. 2

TABLE 5b. Frequency Distribution, Slave Ownership, St. Stephen's Parish, 1850

Interval	Number	Percent	Cumulative	% of Slaveholding	Cumulative
0	74	52.9	52.9		
1-4	17	12.1	65.0	25.8	25.8
5-9	16	11.4	76.4	24.2	50.0
10-19	11	7.9	84.3	16.7	66.7
20-50	13	9.3	93.6	19.7	86.4
51-100	2	1.4	95.0	3.0	89.4
100+	7	5.0	100.0	10.6	100.0
Total	66				

Range, 0-369 Mean Slaveholding = 44.9

Source: Ms. U.S. Census: 1850, South Carolina, Vol. 2

TABLE 5c. Frequency Distribution, Slave Ownership, St. Stephen's Parish, 1860

Interval	Number	Percent	Cumulative	% of Slaveholding	Cumulative
0	147	72.1	72.0		
1-4	14	6.9	79.9	24.6	24.6
5-9	13	6.4	85.3	22.8	47.4
10-19	12	5.9	91.2	21.0	68.4
20-50	10	4.9	96.1	17.5	85.9
51-100	3	1.5	97.6	5.3	91.2
100+	5	2.4	100.0	8.8	100.0
Total	57				

Range, 0-243 Mean Slaveholding = 29.1

Source: U.S. Census, 1860, South Carolina, Vol. 2

By 1850, moreover, the number of small slaveholdings had increased, offsetting the increase in the absolute number of plantations housing more than 100 slaves. St. Stephen's was on the edge of the very rich plantation coastal area, and like the coastal parishes, it consisted of a disproportionately large number of plantations housing over 100 slaves. The "typical" planter in St. Stephen's worked somewhat more slaves than the "typical" Southern planter Stampp described, although the mean size of slaveholding consistently declined between 1840 and 1860. Finally, the distribution of slave ownership within the slave holders seemed to remain fairly stable after 1840. The white and black population remained largely stable until 1850, and modest growth in the parish's total population evidently included the migration into the parish of non-slaveholding farmers and small planters, particularly between 1850 and 1860. Between 1850 and 1860, moreover, the absolute number of slaveholding households dropped although the parish's total number of households increased. The distribution of slaveholding households on the eve of the Civil War suggests that very large plantations had been curtailed as had the very small, a pattern which is consistent with Wright's conclusions. Slaveholders throughout the antebellum period represented a minority within the white population, and ownership had clearly become concentrated relative to its diffusion within the white population in the colonial period. On the other hand, the racial balance between whites and blacks tended to equalize during the first part of the nineteenth century.

After the Civil War

St. Stephen's in the colonial and antebellum periods was an element in the low country economy that saw Charleston emerge as its economic hub. Charleston's prosperity rested on a commercial system consisting of three elements: commodities produced locally or brought to the city for export; transportation facilities of roads, canals and railroads linking Charleston with the interior; and a first-class natural harbor (Moore 1979:156). The effects of westward migration were not felt immediately in the city, although by the 1850s, Charleston's population saw an absolute decline despite growth in the urban population nation-wide and the population of other southern cities (Steen 1970:38-39).

This configuration changed entirely after the Civil War. No manufacturing base emerged in the vicinity of the city, and the development of the textile industry in the upcountry during the closing decades of the nineteenth and early decades of the twentieth centuries enhanced the antebellum difference between the coast and the Piedmont. Industrialization of the upcountry provided an export base for a regional economy defined today by the Greenville and Spartanburg Standard Metropolitan Statistical Areas (Moore 1979:165). Railroad development in the post-war period bypassed Charleston, with the majority of South Carolina cotton shipped via Norfolk (Moore 1979:161). Sustained economic revitalization of the city began at the turn of the century as a result of improvements in naval installations and additional federal projects (Moore 1979:170). Cotton prices were low through the end of the nineteenth century, and although they had begun to turn back upward in the early twentieth century, the dislocations caused by World War I, depredations of the boll weevil, and the Depression finally destroyed the cotton market

(Woodward 1951:181-182; Tindall 1967:121-122, 428-429; Table 6). Crop diversification projects during the New Deal ended the farmers' dependency on cotton (Tindall 1967:403-406, 428-430), and presently the farms in the vicinity of the town of St. Stephen produce soybeans, corn, sorghum and some cotton.

TABLE 6. Berkeley County, Cotton and Corn Production
1889-1939

Year	Cotton (bales)	Corn (bushels)
1889	12,557	296,528
1899	10,419	368,400
1909	17,415	391,195
1919	10,867	468,772
1929	2,944	367,197
1939	3,176	347,885

Sources: <u>U.S. Census: 1895</u>, pp. 383, 396, 407.
<u>U.S. Census: 1902</u>, VI, Pt. 2, pp. 181, 433, 436, 489.
<u>U.S. Census: 1913</u>, VIII, p. 516.
<u>U.S. Census: 1922</u>, VI, Pt. 2, p. 287.
<u>U.S. Census: 1932</u>, II, p. 481.
<u>U.S. Census: 1942</u>, I, pp. 461, 477.

IV. TESTING PHASE

Introduction

The archaeological testing phase began in St. Stephen on March 12, 1979 and was to include test excavations, surface collections, metal detector survey, mapping, and limited historical research on five sites. These sites were 38BK73, 38BK75, 38BK76, 38BK88, and 38BK91. Site 38BK245 was not tested by SSI, but was included in the mitigation phase. From the survey data, preliminary interpretations of site function were made and used to guide fieldwork until testing data were sufficient to make educated field decisions. Concurrent with the field testing, a field laboratory was set up in quarters provided by the Corps of Engineers at the project headquarters. All material retrieved from the field operations was to be washed and preliminarily catalogued in the field laboratory, in order to provide immediate feedback for informed field decisions. The testing phase was successfully completed on April 6, 1979, four weeks after it began. As a result of fieldwork, documented recommendations were developed and submitted to IAS-Atlanta on April 18, 1979. A contract for mitigation at three of the tested sites plus one additional site was negotiated and signed, and mitigation of the four sites began on June 14, 1979, seven weeks after termination of testing. Mitigation fieldwork was completed on October 19, 1979 and is discussed in Chapter VI.

The following sections describe the hypotheses, methods, results, and recommendations of the testing phase and, more importantly, describes the data which caused a major shift in hypotheses developed for the subsequent mitigation phase. It should be noted that the mitigation effort for site 38BK73 is included here since the site ultimately proved to be a treefall and field scatter, and offered no data pertinent to the mitigation goals of the project.

Testing Goals

The Request for Proposals developed by IAS-Atlanta raised many questions of a general nature concerning the sites and historical archaeology. The questions can be grouped into three categories: Those dealing with the ethnic identity of the inhabitants and their social stratification; the settlement and economic relationships within the region; and, lastly, the context of the sites within the larger framework of the field of historical archaeology (Garrow 1979a). Only some of these questions are listed here to illustrate the range of research required and to minimize redundancy.

Under the subject of ethnicity and social stratification, IAS-Atlanta listed the following questions:

1. What is the social identity of the inhabitants of the sites?

2. Is it possible to identify Huguenot as opposed to British American behavioral patterns?

3. How much and what kind of interaction and social stratification was there between French and British Americans?

Under settlement and economic relationships were listed:

1. Is it possible to determine plantation economics, including domestic vs. imported goods, the role of Colonoware, and the economic base of the plantations through archaeology?

2. What is the relationship between the plantations and other plantations, the town of St. Stephen, inns, churches, craftsmen, and factors?

3. How do the economics, settlement, and social relationships of these sites compare to other sites in the area?

4. How do such relationships change through time in the Santee River area?

Under the general category of the sites' contribution to historical archaeology were:

1. What is the overall significance of these sites to contemporary archaeological knowledge?

2. Are these sites representative of Huguenot plantations?

3. Can portions of a system be considered as representative of the whole plantation system?

Since the data provided in the scope of work did not reveal whether any structural remains existed at the sites or whether trash features had been found, it was proposed by SSI to place the major thrust of the testing phase on locating structural remains, features, and artifact patterning to determine whether it was even possible to begin testing more sophisticated questions. Along with this archaeological testing program, preliminary historical research was proposed to determine geneaological data and land ownership, and to assess the available records for their capacity to answer the questions posed by IAS-Atlanta.

Specifically, it was proposed for the testing phase "to conduct an orderly data collecting process that can result in pattern recognition during analysis"; "to locate architectural ruins" and trash features; and finally to analyze and assess the significance and overall potential for further data recovery at the sites (Garrow 1979a). Archival research was to be directed towards developing a concise economic history of French Huguenot settlement in the area; construction of chains of title; compilation of comparative French-British economic data in the area during the period under study; and lastly, locate plantation papers, diaries, and wills generated by the inhabitants of the sites.

While these goals are not hypothetico-deductive in nature, more research was needed to determine whether or not more specific questions could be asked, much less answered. It should be noted that the historical research conducted during testing concentrated on Yaughan plantation, the location of Sites 38BK73, 38BK75, 38BK76. This research dealt mainly with the chain of title and geneaology of the Cordes family, who owned the plantation during

the eighteenth and early nineteenth centuries. However, the time required to locate and interpret the data took longer than anticipated, because the amount and accuracy of the research already completed prior to testing had been overestimated. As a result, no substantive efforts could be made towards establishing chains of title at the other two sites (38BK88 and 38BK91). As testing progressed, it became obvious that these two sites would not contain enough archaeological integrity to warrant mitigation. Discussions of the historical research from both testing and mitigation are presented in Chapters III, V and XI of this report.

Sites Recommended for Clearance

Site 38BK91 (Figure 5) was located in a "pine plowed" field which had been allowed to revert to pine within the four years prior to testing. Such clearing of a pine forest involves not only cutting down the trees and raking back the brush, but also removal of the stumps and larger roots. It is not surprising, therefore, that this site failed to produce any *in-situ* features.

Due to the size, nature of the site, and ground cover, this site was not gridded. All test pits were laid out north-south along a line through the center of the site, as determined by surface collections of artifacts, which in this case were predominantly brick fragments. The surface collection was augmented by shovel cuts and a brief metal detector survey.

The typical stratigraphy at Site 38BK91 (Figure 6) consisted of approximately six inches of brown sandy topsoil overlying four to five inches of light yellow sand, resting on red clay subsoil. Except for Sites 38BK88 and 38BK76, this stratigraphy was typical for the other sites tested (i.e. brown sand, light yellow sand, red clay subsoil). Site 38BK88 had yellow clay subsoil in place of the more typical red clay, and Site 38BK76 had an additional layer of humus overlying the brown sand.

The artifacts recovered by excavation were principally brick and charcoal fragments and, except for surface finds, the artifacts were found in the brown sand layer. Only 11 datable historic sherds were found from surface and excavation combined. The mean ceramic date is 1836.4, but this date is undoubtedly affected by sample size. Three test units were dry screened with three-eighths inch mesh (Test Units 1, 2, and 5) and three were hand sifted (Test Units 3, 4, and 6). It is not felt that hand sifting greatly affected the relative frequencies or totals of cultural material collected at this site.

Vitrified brick or clay fragments and a few lumps of metal, probably nails, were found along with the great amounts of brick and charcoal fragments. Because of the low amount of ceramics and high percentage of brick fragments, it is hypothesized that Site 38BK91 represents a brick kiln or clamp. However, the effects of clearing operations and the lack of features during testing indicated that there was a very low probability of recovering any additional data to substantiate this hypothesis. Therefore, no further work was recommended at Site 38BK91.

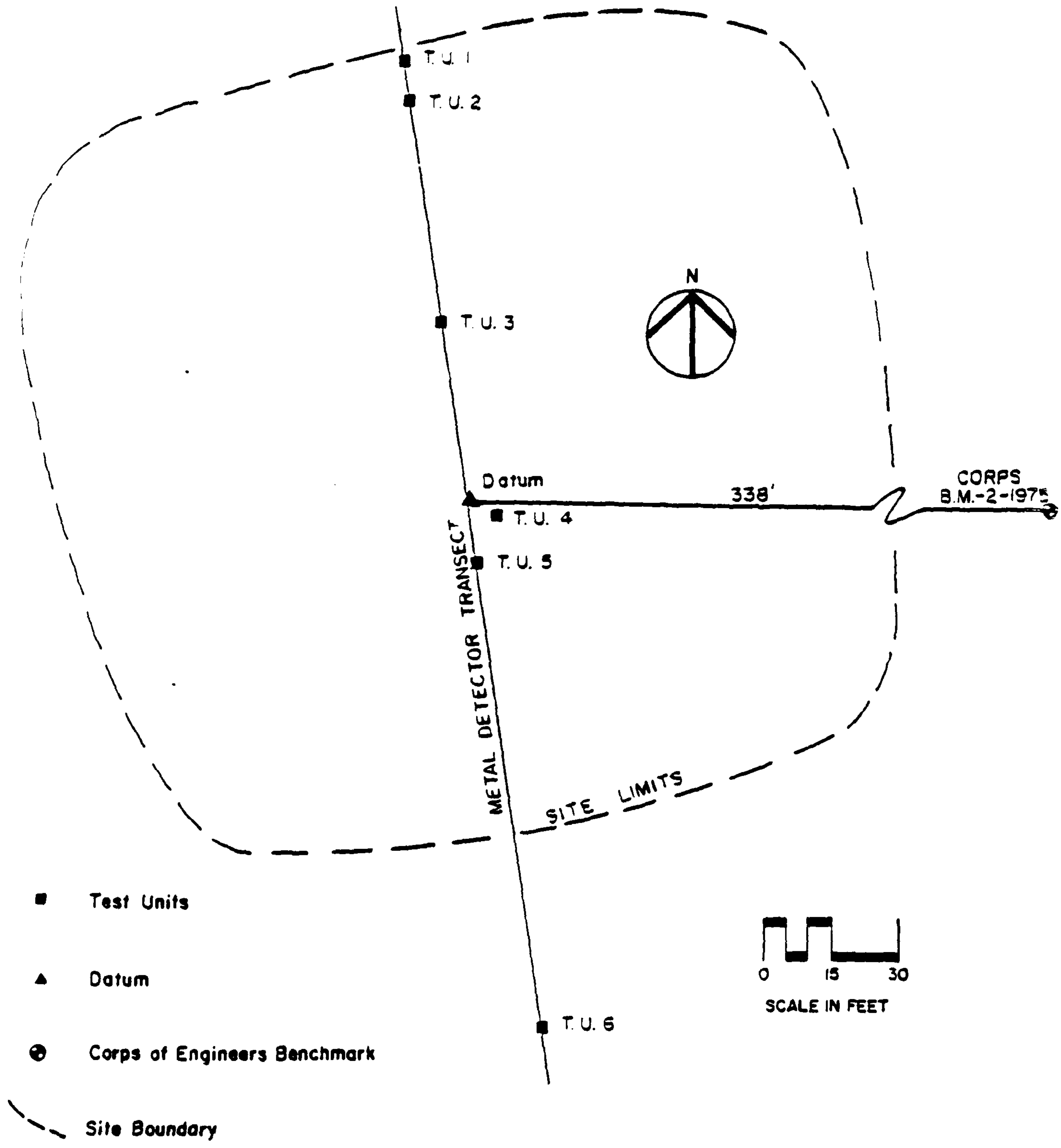


FIGURE 5
Site 38BK91
Testing Site Plan

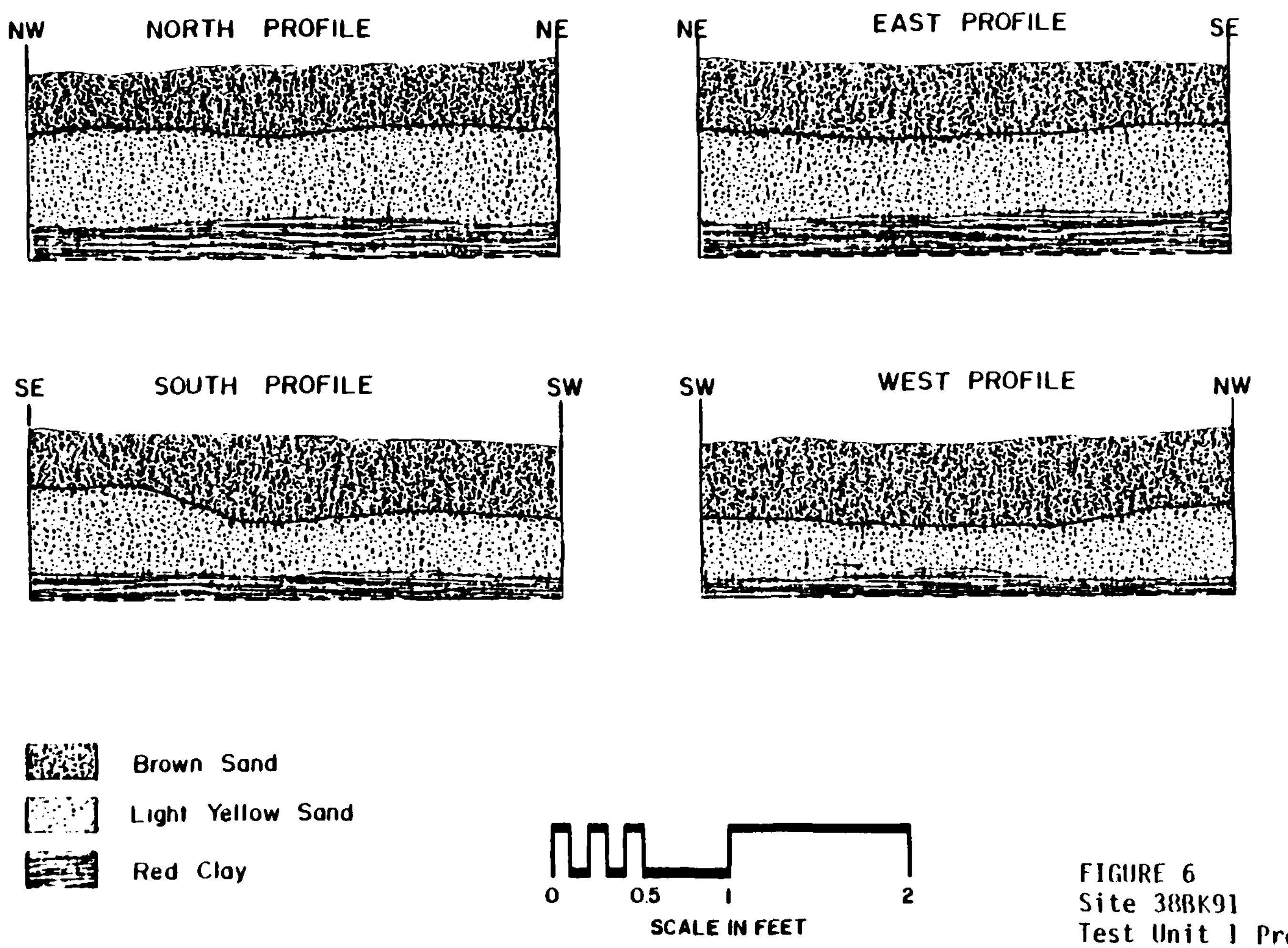


FIGURE 6
Site 38BK91
Test Unit 1 Profiles

Site 38BK88 (Figure 7), with a mean ceramic date of 1808.8, was probably an isolated small farmer's house, possibly with a few small outbuildings. No conclusive statements concerning intrasite function could be made at this site since it had been deep plowed to ±24 inches below grade for ten years prior to testing (Gaillard 1979, personal communication), destroying all but the deepest features and disturbing subsoil to a depth of one foot.

The site was located next to the present Lake Moultrie, but according to the 1921 USGS Chicora Quadrangle map, the nearest large topographic feature to the site before the lake was constructed was Buckhall Bay to the southwest, which appears on the 1825 Mills map of the area as Buckhall Swamp, and on the 1773 Mouzon Map as an unnamed bay or swamp. No houses are recorded on any of the maps at the location of Site 38BK88, although a 1943 USGS Quadrangle map does show two houses near the site on the edge of Lake Moultrie, neither of which is the site in question.

Site 38BK88 can be characterized as being located in swampy uplands and was probably surrounded by dense pine barren at the time the structure was constructed (Herold and Knick 1978). It was approximately three miles inland from the edge of the Santee River floodplain, and from location alone it seems certain that the site was not one of the most desirable plots staked out by the original European settlers of the area. Although it is possible that the site's inhabitants cultivated inland rice fields (Herold and Knick 1978), it seems more likely that they were subsistence farmers in a relatively marginal agricultural zone.

Since the site was nearly level and totally free of ground cover, it was gridded into 50 foot squares from a north-south baseline. Each 50 foot square was intensively (100 percent) surface collected and all grid lines were tested with a metal detector.

Controlled metal detector surveys at all sites involved checking for metal within a four or five foot wide swath along each grid line. Upon location of metal, a wire surveying flag was placed in the ground at that location. Once all of the metal was flagged, the flags were mapped on the site map. Concentrations of metal on Figure 7, noted by solid lines, were determined on the basis of one or more flags per linear foot of grid line. The broken lines on the figure indicate two or more flags per five linear feet of grid line. There were also isolated indications of metal elsewhere on the grid but these were often 25 to 50 feet from each other and did not form concentrations. The information developed from the surface collections and metal detector survey was plotted on maps, and six 3 x 3 foot test units were placed where it was determined they would produce the most subsurface information.

As noted on Figure 7, six 50 foot grid squares contained over 20 "datable" ceramic types (South 1977a:210-212 and Noel Hume 1978) and nine contained between 5 and 20. Most of the remaining squares had none. The six most heavily concentrated squares were also in areas of high metal density. Based upon this information, this area appeared to have the highest probability of yielding features and, for this reason, test units were placed there. The first test unit exposed the remains of a well, probably the only feature left at the site, and the only one found during testing or mitigation.

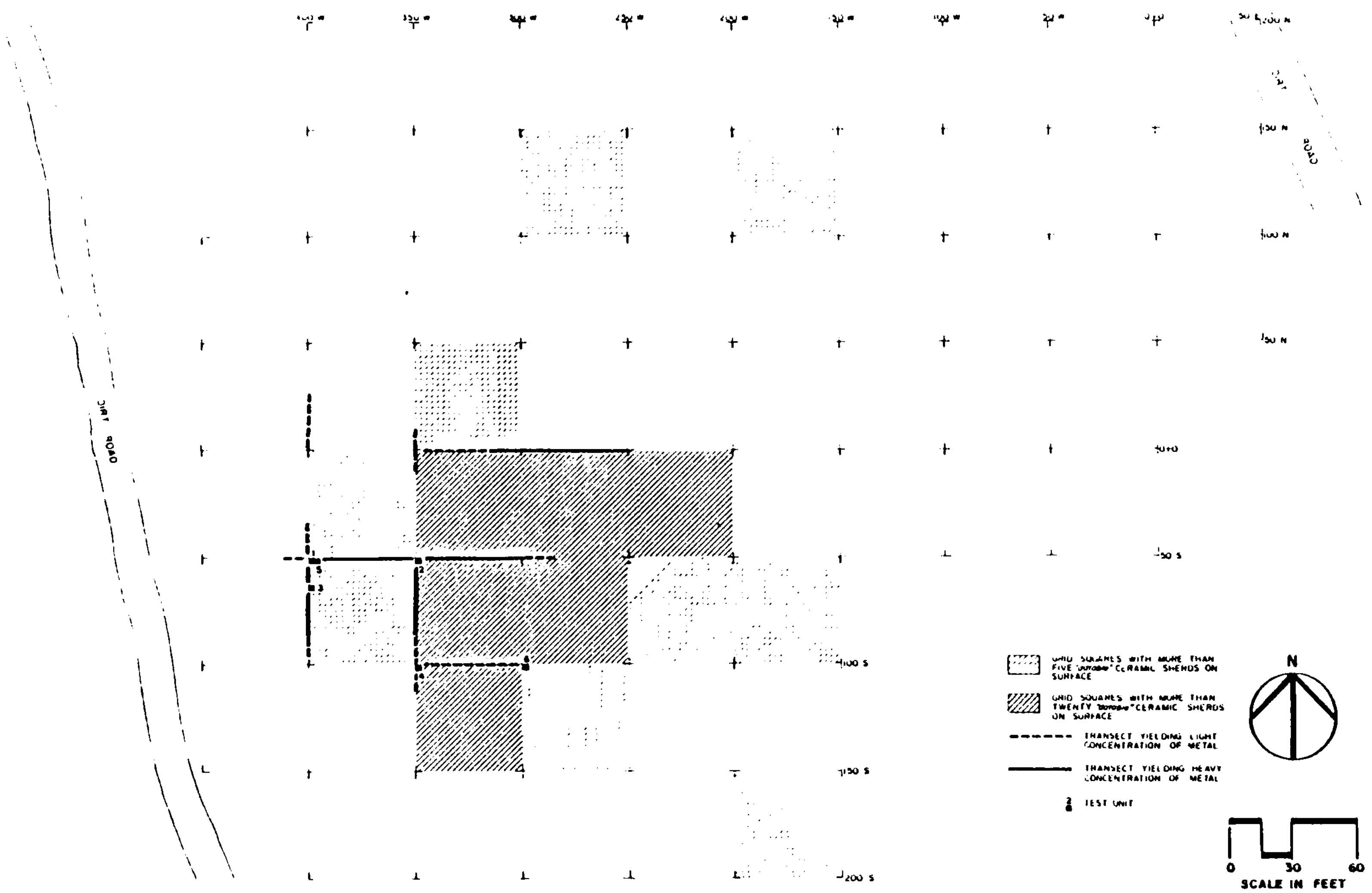


FIGURE 7
Site 38BK75
Site Plan

It is possible that squares 50N/300W, 50N/200W, and 150S/200W (northeast corner coordinates) represented one or more outbuildings or trash features, but a definite conclusion could not be made because of the lack of data and subsurface integrity.

The typical profile at 38BK88 was approximately six inches of brown sandy soil blending with an underlying layer of light yellow sand. The six inch thick layer of light yellow sand then blends with light yellow clay at the bottom, where deep plowing had greatly disturbed the subsoil. Ninety-eight percent of the artifacts recovered from the test units, excluding brick and charcoal, were obtained from the brown sand layer, even though all levels in all pits were thoroughly dry screened with three-eighths inch mesh.

Sites 38BK73, 38BK76, and 38BK91 showed that no features were recorded deeper than two feet below the surface at the sites during testing. This depth of features was further supported during mitigation, since only a few features at 38BK75 and 38BK245 extended more than two feet below the surface. The deepest trash or clay extraction pits at Site 38BK75 occasionally extended to three feet, and at 38BK245, one cellar extended approximately three feet and another four feet below the surface, out of a total of several hundred features.

It seemed safe to assume that if any features were present at 38BK88 they should have begun in the second level, light yellow sand, and continued into the top of the subsoil. Since plowing had disturbed the soil to an average depth of 24 inches, this means that on the average the subsoil was disturbed to a depth of at least one foot below its interface with the light yellow sand layer. On the basis of this information and a lack of any features except the well, it was clear that only the deepest features, wells and privies, would be left at the site.

The only feature that had probably survived at the site was the well found in Test Unit 1 (Figure 8). After clearing the disturbed overburden from the well, rotted brick stains began to show at the base of the unit. As may be seen in the figure, the outline of the well was fairly clear below the overburden-subsoil interface. The well was augered to 4.15 feet below the ground surface (or 2.1 feet below the bottom of the unit) using a three inch hand-turned bucket auger. Augering was discontinued when the boring began caving in, and the very wet clayey sand filling the well continually slipped out of the auger before it could be retracted. The auger did not produce any artifacts, but it did show conclusively that the feature was a well filled with sand and some clay and that it still acted as a retaining vessel much like a dry well.

Before fieldwork began, IAS-Atlanta had hypothesized that 38BK88 was the remains of a tavern noted on the Mouzon map of 1773. Since taverns served wine, among other things, and wine is shipped and served in barrels and bottles, one should have expected to find a relatively higher percentage of olive wine bottle glass at a tavern than at a purely domestic site. The amount of olive glass, as a percentage of Kitchen Group artifacts at 38BK88 from all contexts, was 5.7 percent. At South's (1977a:126-127) tavern site (Brunswick 25), the percentage was 17.3 percent, and was generally over 10 percent at all of his sites. At the slave sites on Yaughan Plantation, the

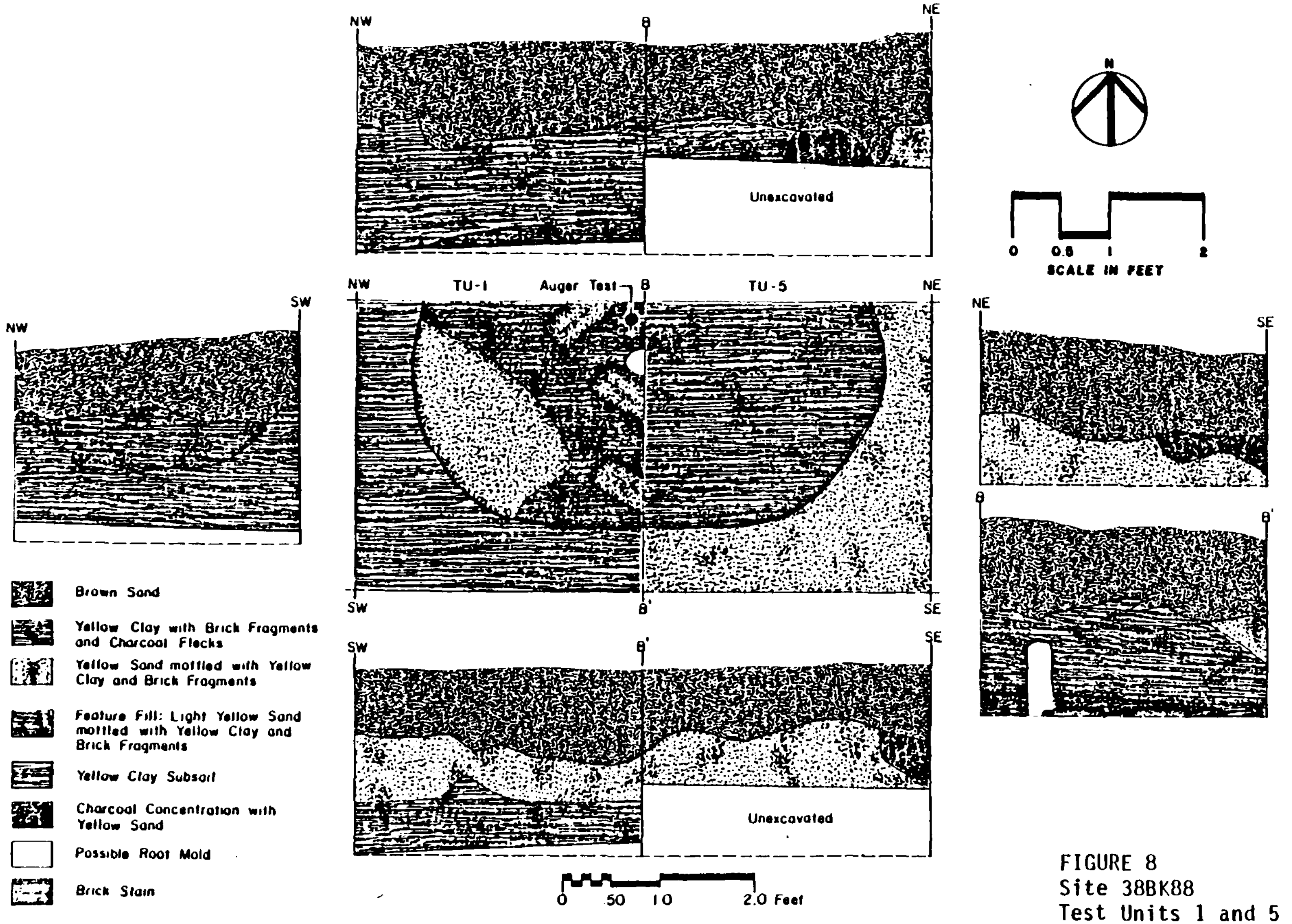


FIGURE 8
Site 38BK88
Test Units 1 and 5
Showing Plan and
Profiles of Feature
88-1-4F

percentages were also low: 8.9 percent at 38BK76 and 9.6 percent 38BK75. At Curriboo Plantation, the percentage in the slave quarters was 14.2 percent.

Further, it is interesting to note that at Yaughan and Curriboo, the percentage of wine bottle glass obtained from surface collections was always considerably higher than that from excavation. If this dichotomy holds true at Site 38BK88, the overall percentage of wine bottle glass should actually have been lower than 5.7 percent, since most artifacts at that site came from the surface. From data gathered on olive green wine bottle glass alone, it would appear that Site 38BK88 was not a tavern.

The nearest tavern on the Mouzon Map (1771) to 38BK88 was approximately one mile to the northeast of the site. While historic maps often have a tendency to be unreliable in some respects, this does not appear to be the case here. This same map correctly locates the St. Stephen church, the Santee River, all major roads, creeks, and swamps to a tolerance of several hundred feet when compared to modern maps of the area. A mistake of over a mile in the location of a tavern seems unlikely in this case.

The mean ceramic date of the site is 1808.8 and the occupation range is 1790-1827 (South 1977a:215). This puts the site 17 years too late (1790-1773=17) for the 1771 Mouzon Map. Although this method of dating occupation ranges is inconclusive, only one ceramic type has a beginning date even close to the 1771 Mouzon Map and that is lighter yellow creamware, which Noel Hume and South (South 1977a:212) begin dating at 1775, four years after the Mouzon Map.

In summary, Site 38BK88 was too late, too far away, and had too few wine bottles to be the tavern noted on the Mouzon Map. Our interpretation of the site, as noted above, is that it was probably an isolated farmstead. We did not recommend mitigation at Site 38BK88. The primary reason for this recommendation was that the proposed impact from dumping activities could not impact the site any more than deep plowing had already done. Furthermore, even if dumping activities were to have included complete excavation of the site, the expected return from any mitigation excavations would not have produced much more information about artifact distribution and patterning than was already available from the testing program.

Sites Recommended for Mitigation

Site 38BK73 (Figure 9) was located in an open field with moderate ground cover approximately 275 feet to the west and four to six feet in elevation above a small creek. To the west of the site was a dirt road leading to Sites 38BK75 and 38BK76 to the northeast. This road may have been the main access road to the principal buildings of Yaughan Plantation, although there is no documentary proof for this. Until moved to the west by the Corps of Engineers, the road was used by the Platt family to get to their homes beyond Sites 38BK75 and 38BK76.

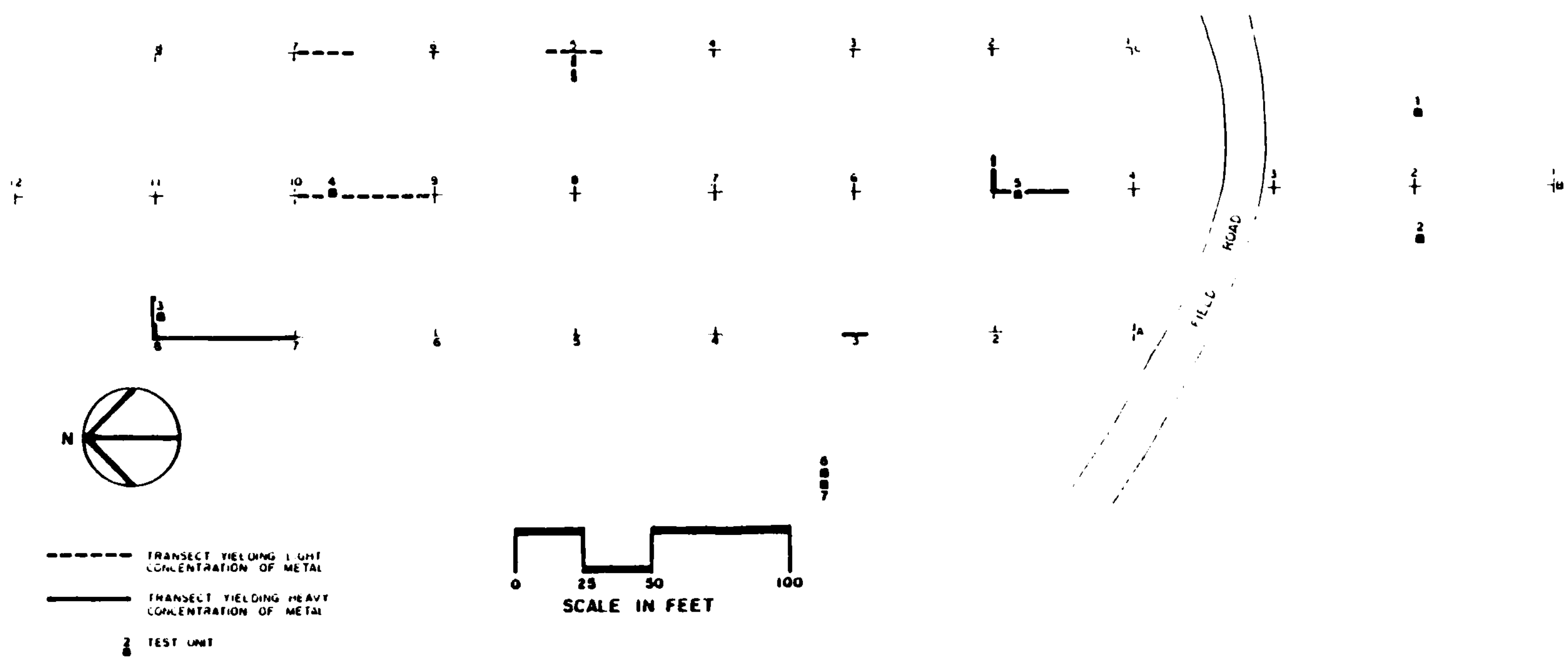


FIGURE 9
Site 38BK73
Site Plan

Site 38BK73, located by Brockington (1980:35) during his survey, was described as a thin scatter of late eighteenth to late nineteenth century artifacts. Because it did not produce any subsurface artifacts from three shovel tests, Brockington did not recommend any testing at the site, although he did recommend that the site be monitored during construction. His reasoning was that even though the site did not produce subsurface artifacts or features, it was one of only four upland eighteenth century sites found during the survey and, as such, was rare in the project area.

It was later decided by others (including the President's Advisory Council) that the site should be tested. Seven 3 X 3 foot test units were excavated and the soil dry screened with three-eighths inch mesh. A 50 x 50 foot grid was laid out, each square was surface collected, and the grid lines were submitted to a metal detector survey (Figure 9).

The results of the surface collection and metal detector survey were disappointing. Only six artifacts were recovered, compared to over 30 found during the survey phase (Brockington 1980), and the metal concentrations were not as extensive or as dense as those at 38BK75 and 38BK88.

The test units produced more artifacts than the surface collection, 36, but these did not help very much in site interpretation. Test Unit 5 eventually produced the remains of a picnic or trash fire of very recent origin, and the metal noted in the vicinity of Test Unit 5 on Figure 9 is undoubtedly the remains of this same feature.

As testing was being completed at 38BK73, a concentration of what appeared to be brick fragments was noticed outside the gridded area. In order to determine whether these were the remains of a structure or chimney fall, two test units, numbers 6 and 7, were excavated. Upon completion of the test units to a yellow clay feature, auger tests were extended to the south and east from the sides of Test Unit 6 to establish the limits of the feature. The result of this operation was the diagram in Figure 10, showing the estimated extent of this feature. Based on this data, it was recommended that 38BK73 be accorded the lowest priority for the mitigation, after 38BK75 and 38BK76. Specifically, it was recommended that a 20 x 20 foot block be excavated around the feature (Garrow 1979a).

Mitigation began in June 1979 and lasted one week plus two days with half a crew. During this time, a 20 foot block was excavated in five foot square units with one foot baulks left between units (Figure 11). All soil was dry screened through 1/4-inch mesh and soil samples were taken of representative natural levels and units, as well as extensive samples of the yellow clay feature itself. There was no evidence of deep plowing, although plow scars were visible in the top inches of the yellow clay feature and surrounding soil (Figure 12).

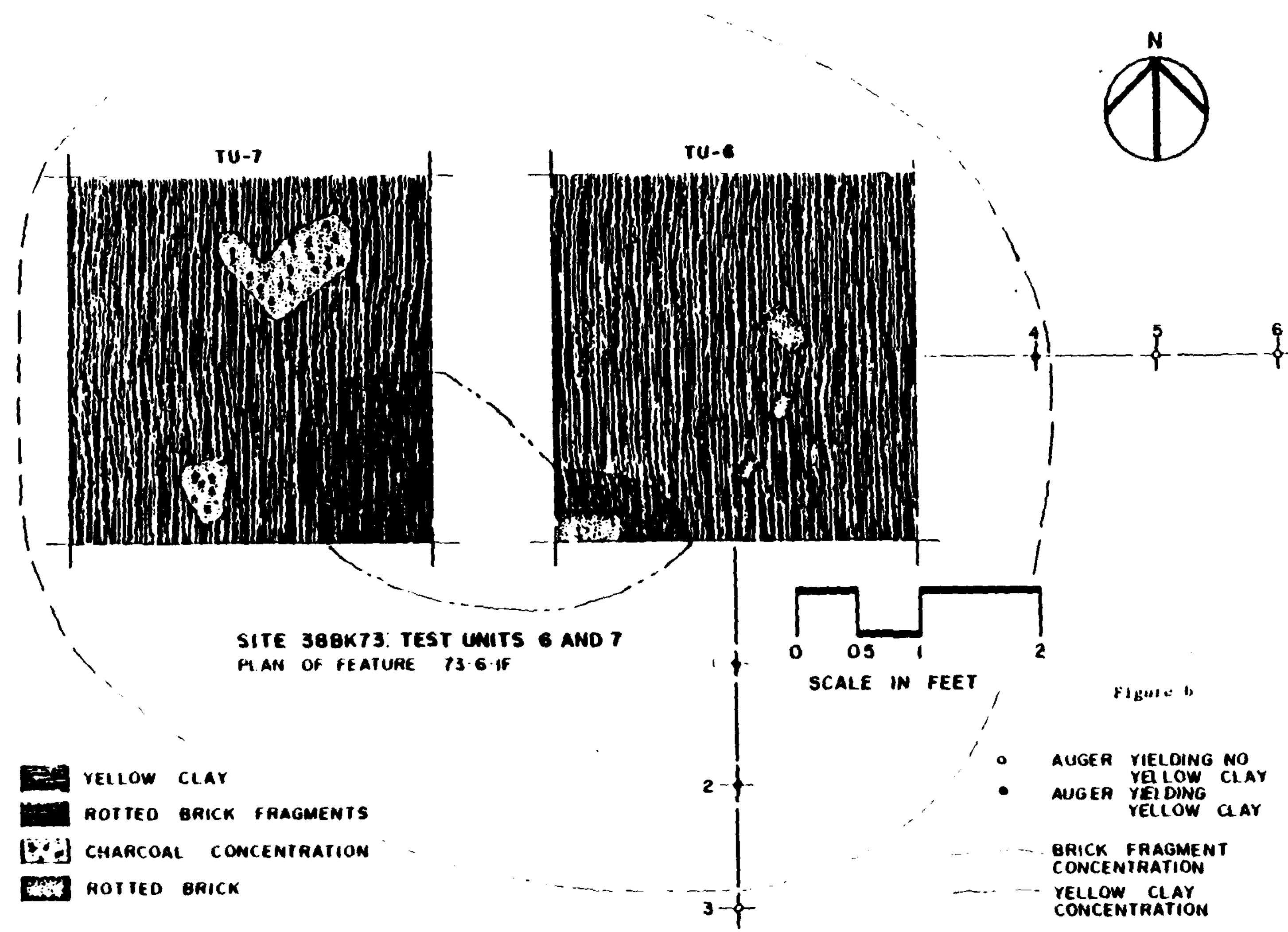
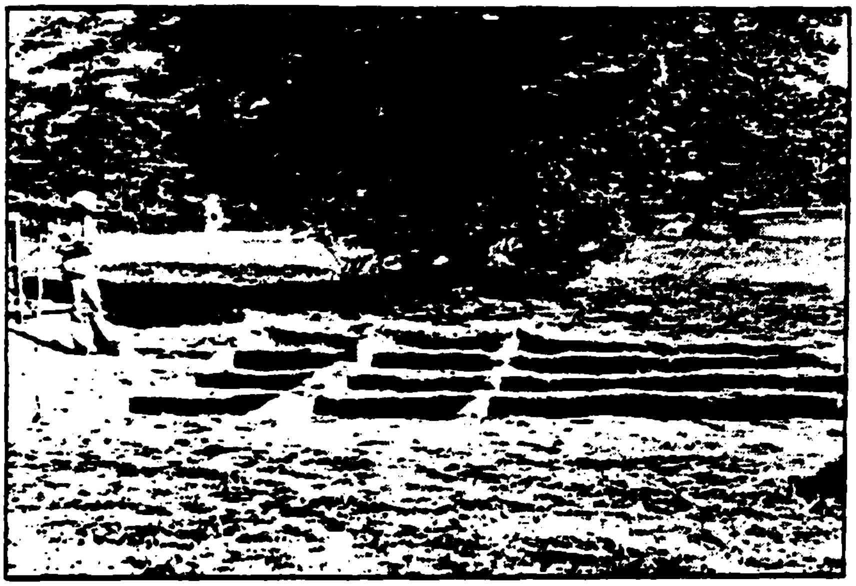


FIGURE 10
Site 38BK73
Test Units 6 and 7



MITIGATION AT
SITE 38 BK 73
LOOKING NORTH

TESTING AT
SITE 38 BK 75
LOOKING NORTH

FIGURE 11
Photos of
Site 38BK73 and 38BK75

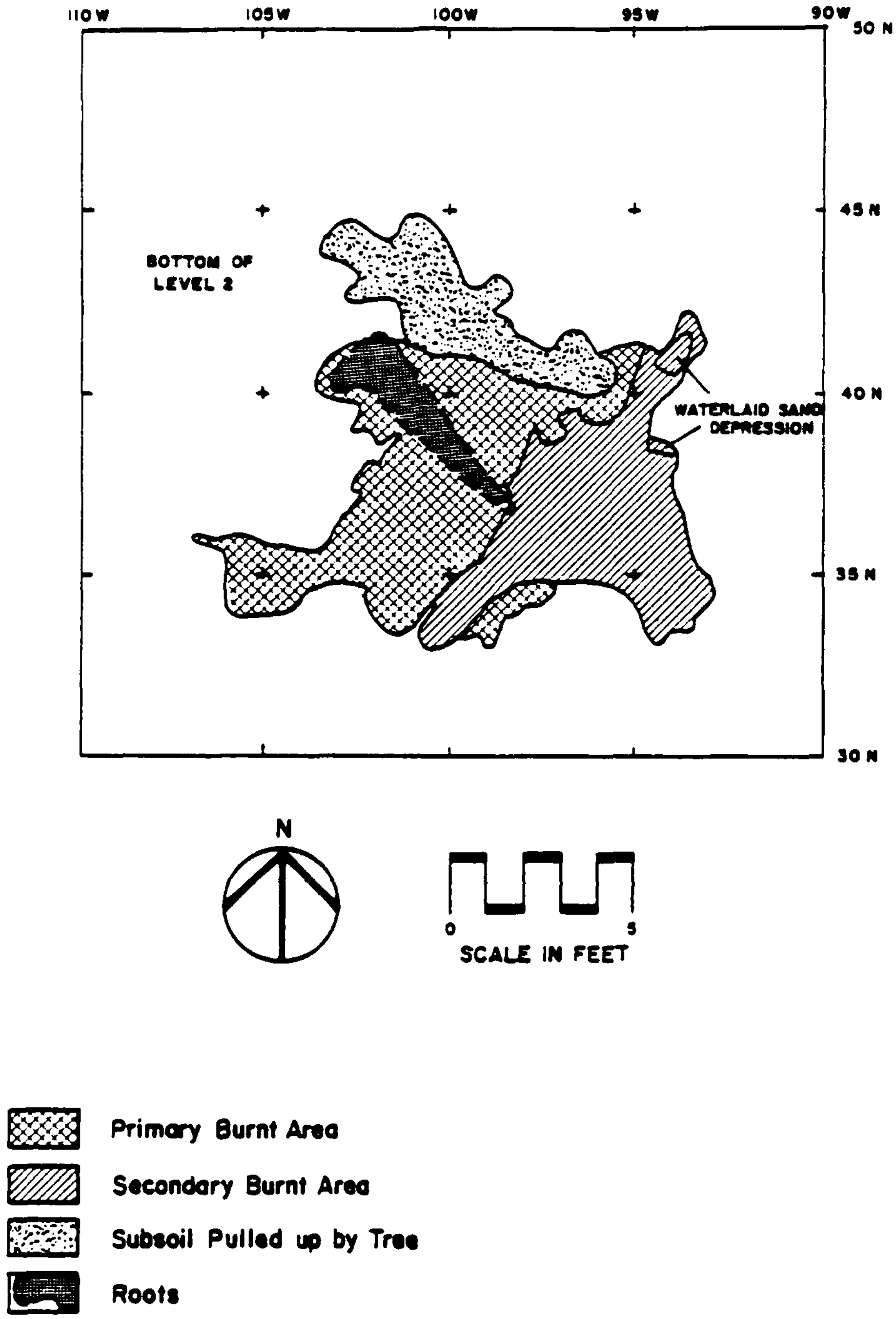


FIGURE 12
Site 38BK73
Block Excavation Tree Fall

Once the feature had been nearly cleared off it became evident that no postholes or other architectural features were present. It was then hypothesized that the feature, which showed evidence of having been burned, represented a wattle and daub chimney fall covering all other architectural evidence. The lack of artifacts, less than had been found during survey or testing (only 14), further indicated a special use structure such as a tobacco barn. As the last 5 foot unit was excavated, what appeared to be a post and charcoal concentration seemed to support the hypothesis of a non-domestic structure.

However, once this unit was completed, the baulks removed, and the field map critically examined, it became obvious that 38BK73 was a treefall that had burned in place. The "post" and charcoal were the incompletely burned roots, the fired clay was the area under and around the tree trunk and larger branches, and the yellow clay "floor" or "chimney fall" was deeply buried subsoil which had been pulled up by the tree roots, and not imported from elsewhere as had been suspected.

The presence of artifacts, which were most heavily concentrated on or near the surface of the field, was most likely due to trash dumping activities by the inhabitants of Site 38BK110, an eighteenth-nineteenth century site outside the boundaries of the project, and located to the north of 38BK73. It is possible that this corner of the field was used by others for dumping as well.

Site 38BK75 (Figures 11 and 13) was found by Brockington (1980:45-47) during his survey and described as a heavy concentration of eighteenth and early nineteenth century artifacts in two loci. Locus B was outside the project area, and a surface collection there during testing indicated that it was probably the site of the main plantation house. Locus A was a heavy concentration of eighteenth and early nineteenth century artifacts located in an open field next to the Platt access road and included a heavy concentration of Colonoware. Brockington recommended testing and mitigation at Locus A. Testing was conducted and bore out Brockington's high expectations for the site.

The testing program extended over a period of one and half weeks with a two person crew. A 50 foot grid was laid out along a slight ridge which runs northeast-southwest through the main portion of the site. Testing subsequently showed that Loci A and B were not connected while Sites 38BK75 and 38BK76 to the east were connected at the northeastern end of 38BK75 Locus A and the northwestern or western end of 38BK76, by an area almost twice as large as the original 38BK75 alone. No attempt was made to place test pits in this intervening area, as the scope of work indicated the two sites were discrete, and the level of effort was for two medium sized sites and not three and a half. For these reasons, the concentration of artifacts at 38BK75-Locus A (Figure 13) was gridded and surface collected. A metal detector survey was run following all grid lines. After plotting this information on a map and field inspection of the site's varying elevations, 16 test units were placed where they promised to produce the most information. Two features were located, a small disturbed Archaic Period lithic scatter was recovered in Test Unit 5 in the light yellow sand layer, and a historic trash pit in Test Units 1 and 1A. Since the major thrust of the

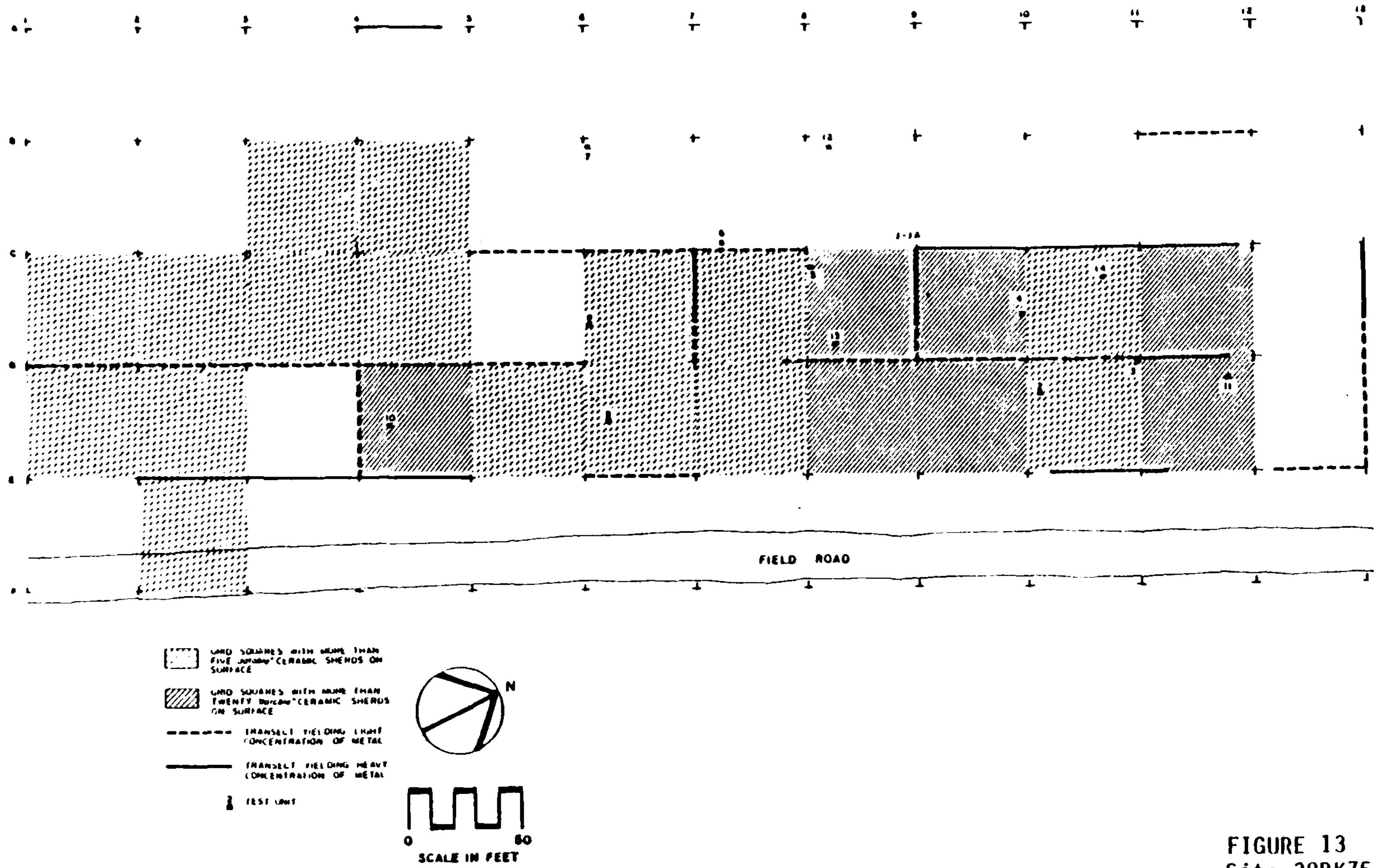


FIGURE 13
Site 38BK75
Site Plan

testing program was the Historic Period, and the prehistoric artifacts recovered were sparse and disturbed, it was decided that the prehistoric component did not warrant further investigation at that time, and work was directed towards investigating the historic component, especially the trash pit.

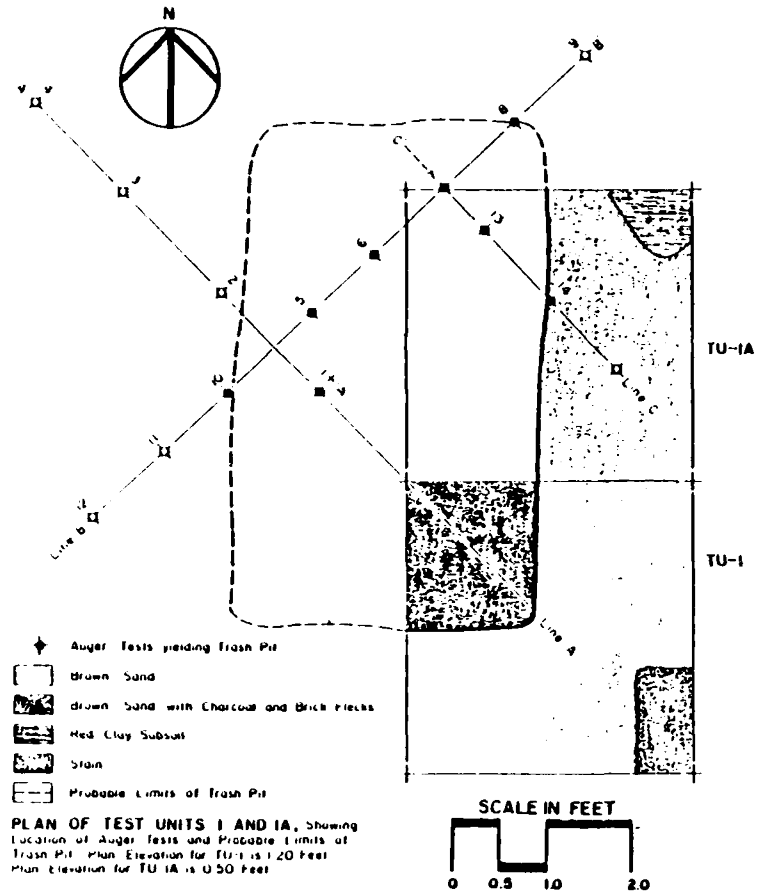
Test Unit 1 was taken down to a point 1.3 feet below the surface where the feature appeared to be square (Figures 14 and 15). Test Unit 1A was taken down approximately six inches below the surface to the top of the same feature to help determine its horizontal extent. In conjunction with excavation and in the interests of preserving the feature, auger borings were placed across the feature to determine the horizontal and vertical dimensions outside the test unit without excavating and thereby damaging the feature. This proved partially successful and resulted in a hypothetical outline of the feature (Figure 13), its depth and, combined with screening of feature fill in Test Unit 1, its contents.

The typical profile at Site 38BK75 was similar to those at 38BK73 and 38BK91 (Figure 15). Eighty-five percent of all artifacts, excluding brick and charcoal, were found in the brown sand layer. The presence of the preserved feature at the site shows that ground disturbance of the historic component had been superficial, and the probability of in-situ remains was high. The site appeared to consist of a series of artifact concentrations running northeast to southwest along the center squares of the grid (Figure 13). A summary discussion of the testing results at 38BK75 and 38BK76, the Yaughan slave quarters is given after the following discussion of Site 38BK76.

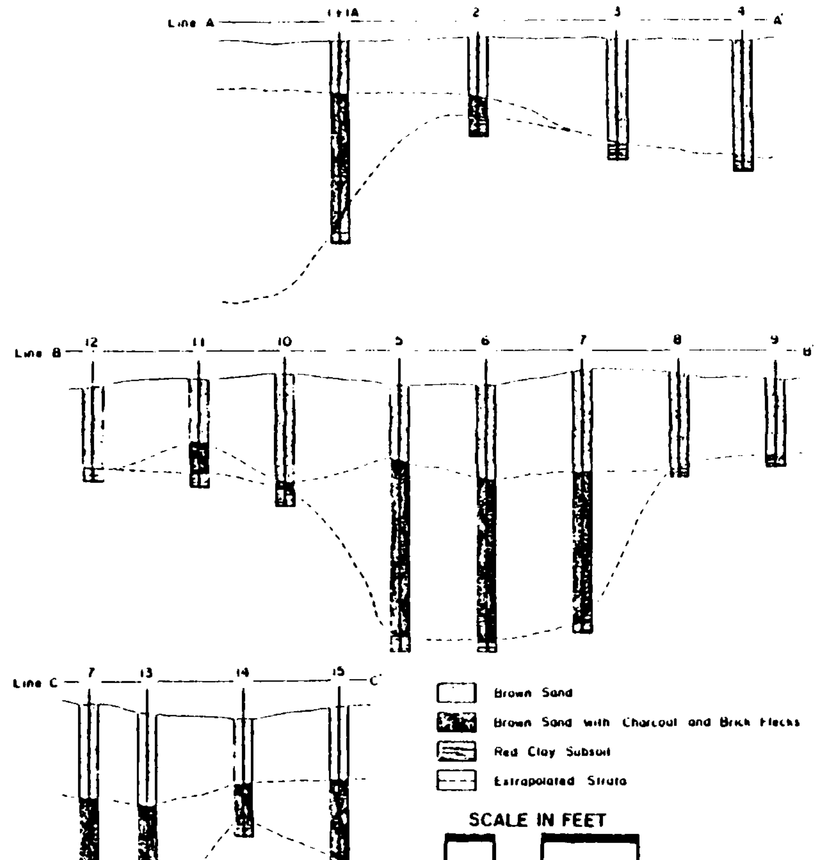
Site 38BK76 (Figure 16) was approached differently from the other four sites. This was due to several factors: large piles of brush produced by partial logging of the site, the large size of the site, the many remaining trees and heavy root systems, and restricted access to and within the site produced by high groundwater (Figure 17).

It was physically impossible to set up a grid within the time limits imposed on the project and a decision not to use damaging heavy machinery on the site during testing. It was, therefore, decided to use a series of raked back areas, where vegetation permitted, to expose as much of the surface as possible. Thirty-five rake backs were placed, primarily on the southeast, south, and southwest quadrants of the site. These were then visually inspected for artifacts and mapped (Figure 16). Rake backs 1, 14, 18, and 34 produced a total of seven artifacts of which three were in the largest rake back (number 1); two were prehistoric, and five were historic.

Following the rake backs, the three roads crossing the site on its northern half were inspected to determine the northern and east-west extent of the site. It was during this phase that the connection between Sites 38BK75 and 38BK76, as noted above, was discovered. This connecting area was heavily rutted by the roads and all low spots contained standing water.



PLAN OF TEST UNITS I AND IA, Showing Location of Auger Tests and Probable Limits of Trash Pit. Plan Elevation for TU-I is 1.20 Feet. Plan Elevation for TU IA is 0.50 Feet



EXTRAPOLATED PROFILES OF AUGER TESTS
Testing made with Three-inch Bucket Auger to determine Limits of Possible Trash Pit

FIGURE 14
Site 38BK75
Test Unit 1

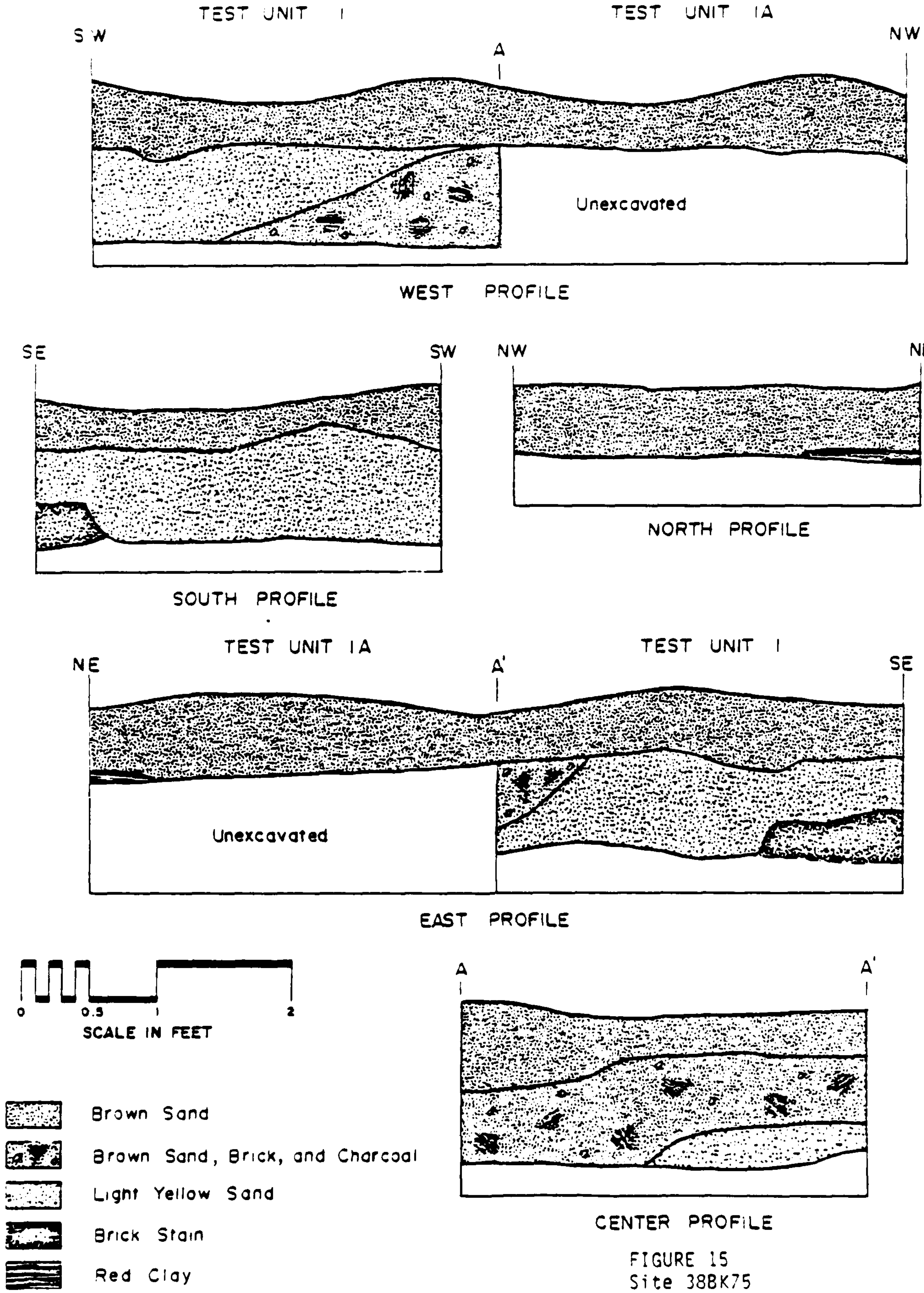


FIGURE 15
Site 38BK75
Profiles-Test Units 1-1A

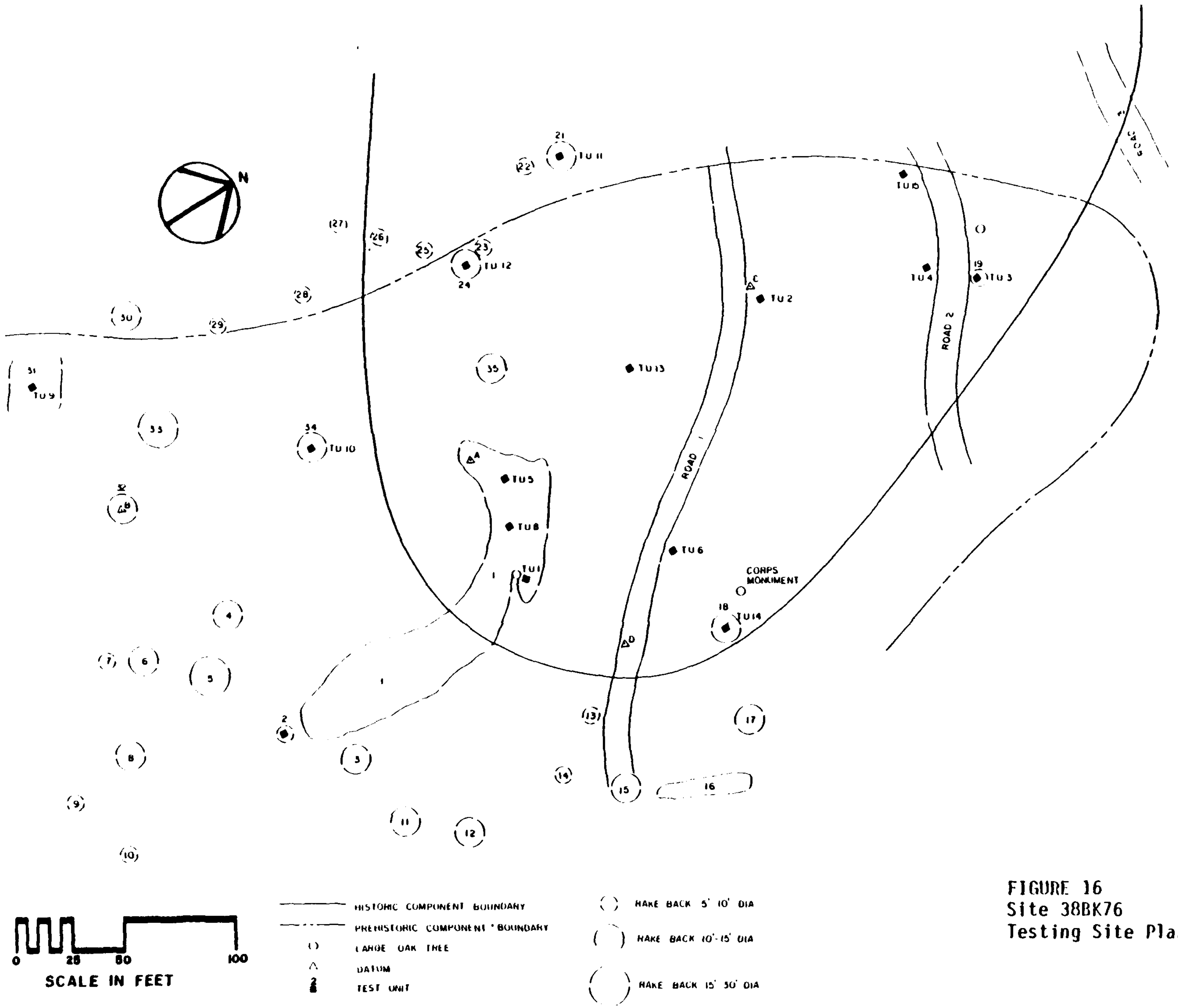
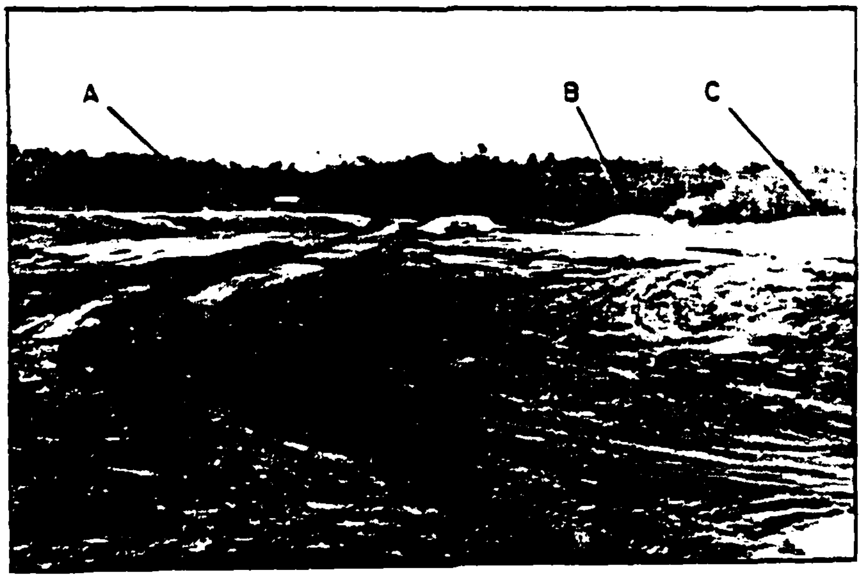


FIGURE 16
Site 38BK76
Testing Site Plan

TESTING CONDITIONS
AT SITE 38 BK 76



CONSTRUCTION AND
BORROW PIT AT SITE 38BK245
LOOKING WEST PRIOR TO
MITIGATION PHASE

A - STRIPPED AREAS
B - MOUND LEFT AROUND KILN (245K)
C - AREA OF BRICK STRUCTURE (245C)

FIGURE 17
Photos of Site 38BK76
and Site 38BK245 Testing

Once the limits of the site were more or less determined, 15 test units were placed to more precisely locate the site boundaries (Test Units 7, 9, 11, and 14), to understand the stratigraphy and check its depth (Test Units 1, 2, and 3), to search for probable areas of buried structures following a metal detector survey (Test Units 5, 6, and 8), and to locate features in areas considered to be high probability areas because of elevation and topography (Test Units 4, 10, 12, 13, and 15). Of these test units, numbers 3, 8, 13, and 14 produced features. There were two postholes in 3; a single posthole in 8; a possible posthole in 13; and a possible posthole in 14. For future reference the postholes in Test Unit 3 were part of Structure 76A and the posthole in Test Unit 8 was part Structure 76B. The possible posthole in Test Unit 13 was not associated with a structure, and the possible posthole in Test Unit 14 may have been associated with Structure L.

The typical stratigraphy at Site 38BK76 is illustrated by Test Unit 3 (Figure 18). Approximately 1 1/2 inches of humus and root mat overlies six inches of brown sand over six inches of light yellow sand, resting on red clay subsoil. Over two-thirds of the historic artifacts, excluding brick and charcoal fragments, were found in the humus and brown sand layers. The prehistoric (mainly Woodland) artifacts were found in these top two levels as well. No prehistoric features were located. The stratigraphy of the entire site appears to be relatively undisturbed since occupation in the early nineteenth century. Local informants maintain that the site was not logged before the present partial logging. Although this is undoubtedly in error, it does seem certain, from the predominance of hardwoods, that the site has not been greatly disturbed for the last 75 to 100 years. For this reason and the presence of five intact features located during testing, the probability of delineating structures and associated features was high.

Because of the sparseness of the prehistoric component, its restriction to a small part of the site and its position across a creek from and to the east of 38BK236, of which it probably formed a minor part, no emphasis was placed on this component during the following mitigation phase.

Analysis of Sites 38BK75 and 38BK76

Since it was clear at the end of testing that Sites 38BK75 and 38BK76 were connected, it was felt that they should be discussed and analyzed together. A large collection of ceramics was retrieved from Site 38BK75, Loci A and B. Testing at Site 38BK75-Locus B were restricted to controlled and uncontrolled surface collections, as that locus was outside the project boundaries. The ceramics retrieved from 38BK75-Locus B are presented in Table 7.

The site description in the Request for Proposal and Brockington's (1980) report stated that 38BK75-Locus B represented an overseer's or master's house. The ceramic frequencies cited above in Table 7 reinforce that interpretation, but conclusive proof in the form of historical research has not been found. It is probably significant that colonoware is represented as a mere 2.3 percent of the total ceramic inventory at Locus B. If the site was an overseer's or master's house, the occupants probably would not have been using or generating colonoware.

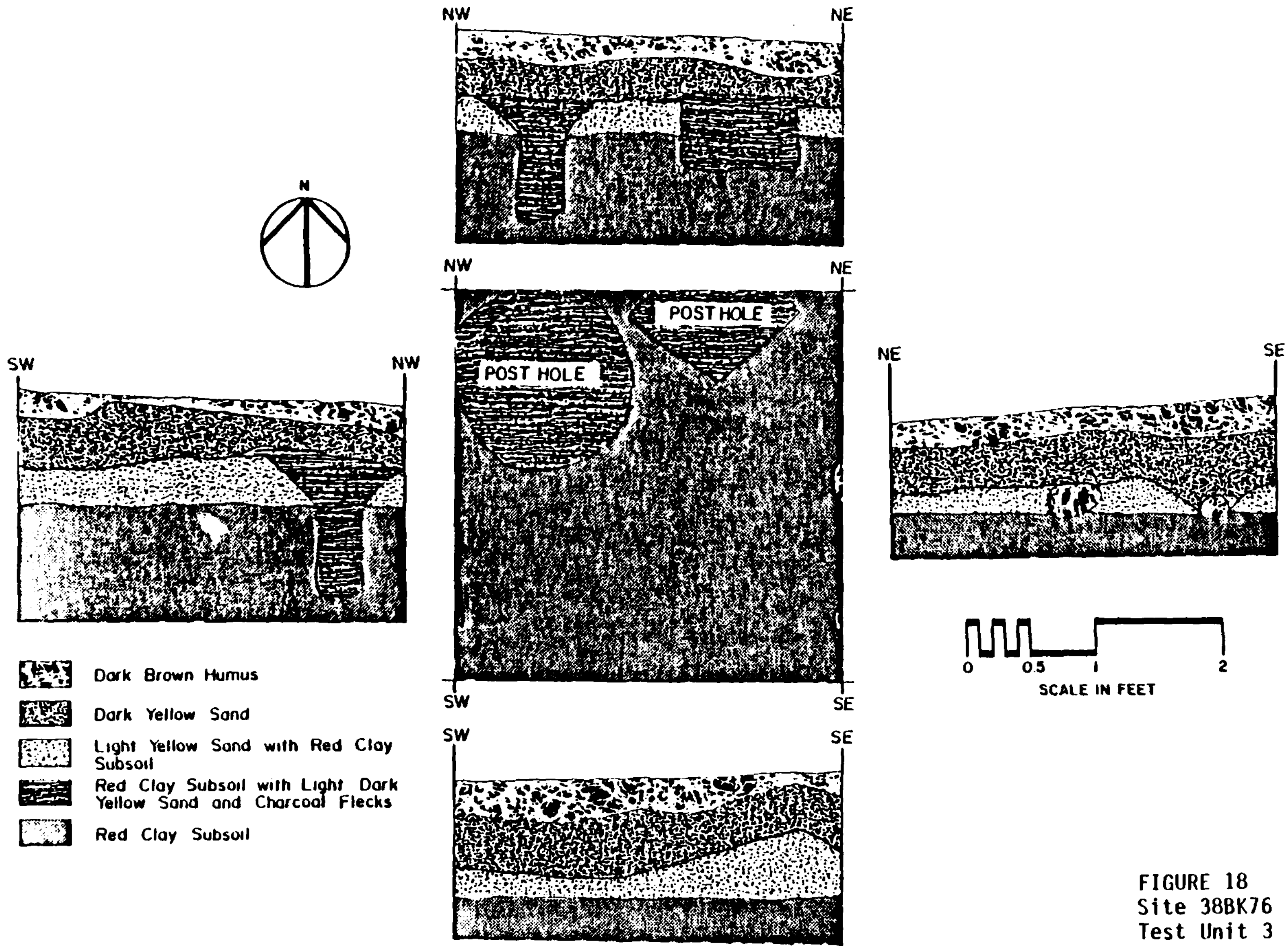


FIGURE 18
Site 38BK76
Test Unit 3

TABLE 7. Historic Ceramics Recovered from 38BK75-Locus B (Testing)

	Site 38BK75-Locus B	Total Surface
Non-local Ceramics		
Creamware	53	10.9%
Pearlware	285	58.5%
Porcelain	19	3.9%
Whiteware	99	20.3%
Delft	0	0.0%
Stoneware	18	3.7%
Redware	0	0.0%
Soft Paste Earthenware	2	0.4%
	476	97.7%
Local Ceramics		
Colono	11	2.3%

The ceramic frequencies from Locus B contrast sharply with those recovered from Locus A, as presented in Table 8. Locus A was interpreted as a habitation site occupied by African slaves on the basis of the large percentage of Colono sherds recovered. There is little doubt that Loci A and B overlapped in time, although Locus A carried a mean ceramic date (South 1977:207-218) of 1803.0, and the mean ceramic date of Locus B was 1814.3, as determined by testing phase material alone. Ultimately, Locus A had an MCD of 1789.8. Time lag (Adams and Gaw 1977) of 24.5 years (1789.8 to 1814.3) is hardly surprising between an overseer's/owner's house and slave habitations.

As described above, Site 38BK76 presented severe collection and testing difficulties. Despite these difficulties, 38BK76 yielded the largest ceramic collection of the three sites recommended for mitigation. Table 9 presents the ceramic sample extracted from this site.

The most striking feature of the 38BK76 testing collection was the overwhelming amount of colonoware. At 38BK75-Locus A colonoware sherds accounted for 51.2 percent of the sample of sherds. Site 38BK76 yielded a slightly larger sample of 556 sherds, of which 522, or 93.9 percent, were colonoware sherds. Assuming that colonoware sherds were made and used by slaves, it followed that the residents of 38BK76 had less access to manufactured goods than did the residents of 38BK75-Locus A. This factor seemed, on the basis of testing, to indicate that the residents of 38BK76 occupied a lower socioeconomic status within the plantation system than did the slaves that lived at 38BK75-Locus A. It was suggested that the status differential observed between these two areas represented the dichotomy of house and field servants within the plantation system.

Study of the relative topography of Sites 38BK76 and 38BK75, Loci A and B, indicated that 38BK76 occupied the area closest to the Santee River swamps and as such the lowest elevation of the three sites. Figure 19 depicts the average elevation of each site and the percentage of local and non-local ceramics recovered during testing. This figure clearly indicates that 38BK75-Locus B not only occupied the highest elevation among the three sites, but also contained the highest percentage of non-local ceramics. It was felt at the end of testing that relative elevation and distance from the Santee River might be indicators of status differences.

The mean ceramic date (South 1977a:207-218) achieved from 38BK76 after testing was 1786.8. That date is 16.2 years earlier than the testing date achieved for 38BK75-Locus A and 27.5 years earlier than the testing date for 38BK76-Locus B. Although it seemed possible that 38BK76 was established earlier than the other sites, there was equally little doubt that the sites were contemporaneous for at least part of their occupation ranges. Also, the mean ceramic date at 38BK76 was based on a sample of 34 sherds and was considered questionable for that reason. An additional explanation of the differences in mean ceramic dates, it was thought, would be a compounded time lag factor (Adams and Gaw 1977) in view of the hypothesized status differentiation among the sites. The question of contemporaneity of the sites and time lag in the ceramics was, therefore, a guiding question during the subsequent mitigation phase.

TABLE 8. Historic Ceramics Recovered from Site 38BK75-Locus A (Testing)

Site 38BK75-Locus A Surface Materials		
Non-local Ceramics		
Creamware	34	7.3%
Pearlware	134	28.9%
Porcelain	7	1.5%
Whiteware	14	3.0%
Delft	3	0.7%
Stoneware	35	7.5%
Redware	5	1.1%
Soft Paste Earthenware	4	0.8%
	236	50.8%
Local Ceramics		
Colono	228	49.2%
Site 38BK75-Locus A Excavated Materials		
Non-local Ceramics		
Creamware	1	2.5%
Pearlware	6	15.0%
Porcelain	0	0.0%
Whiteware	0	0.0%
Delft	0	0.0%
Stoneware	2	5.0%
Redware	1	2.5%
Soft Paste Earthenware	0	0.0%
	10	25.0%
Local Ceramics		
Colono	30	75.0%
Total Sample		
Non-Local Ceramics	246	48.8%
Local Ceramics	258	51.2%

TABLE 9. Historic Ceramics Recovered from Site 38BK76 (Testing)

Site 38BK76 Surface Materials		
Non-local Ceramics		
Creamware	0	0.0%
Pearlware	3	2.4%
Porcelain	2	1.6%
Whiteware	3	2.4%
Delft	0	0.0%
Stoneware	0	0.0%
Redware	0	0.0%
Soft Paste Earthenware	2	1.6%
	10	8.1%
Local Ceramics		
Colono	114	91.9%
Site 38BK76 Excavated Materials		
Non-local Ceramics		
Creamware	10	2.3%
Pearlware	4	0.9%
Porcelain	4	0.9%
Whiteware	0	0.0%
Delft	2	0.5%
Stoneware	2	0.5%
Redware	0	0.0%
Soft Paste Earthenware	2	0.5%
	24	5.6%
Local Ceramics		
Colono	408	94.4%
Site 38BK76 Total Collection		
Non-local Ceramics	34	6.1%
Local Ceramics	522	93.9%

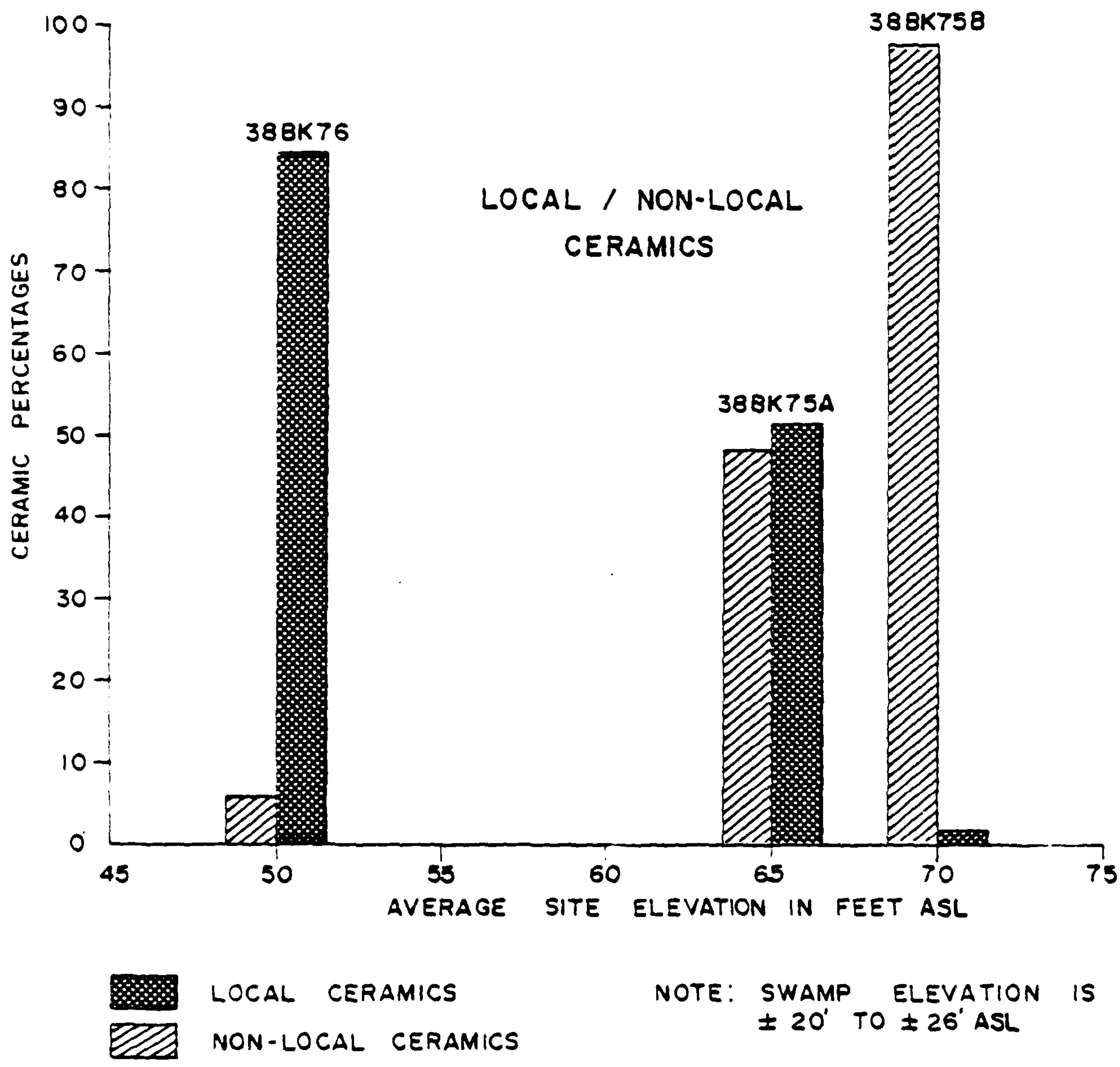


FIGURE 19
Site 38BK75 and Site 38BK76
Relative Amounts of Nonlocal
and Local Ceramics

It was apparent that Sites 38BK75 and 38BK76 were closely linked temporally, geographically, and culturally at the end of testing. This linkage was probably stronger than that between Loci A and B at 38BK75 (unless otherwise noted, 38BK75-Locus A will henceforth be referred to as 38BK75, since Locus B was not studied further). However, the preliminary analysis of the sites recommended for additional investigation presented more potential questions than answers. It was hoped that mitigation of these sites would lead to understanding the function and relative socio-economic positions of each site, as well as yielding a substantive contribution to our understanding of the material culture and structure of a slave community.

It was hypothesized that both 38BK75 and 38BK76 represented slave quarters of the same plantation and that the difference in percentages of colonoware and mean ceramic dates was a reflection of status differences among the slaves occupying the two sites. Site 38BK76 was thought to represent the habitation of field hands and Site 38BK75 the location of either house slaves, craftsmen, or both. It was proposed for mitigation to examine cultural differences as expressed in artifact distribution and patterns in more detail than had been possible during the testing phase. For example, it was expected that more furniture and personal group artifacts (South 1977a) should have been found at 38BK75 than 38BK76; and house size and quality should have been larger and better at 38BK75 than at 38BK76. It was also proposed to study the subsistence base and available plantation technologies, such as colonoware at 38BK75 and 38BK76.

It was proposed to excavate a 40 x 40 foot block around Feature 1 at Site 38BK75 in order to examine the feature found during testing and find the house suspected to be nearby. At 38BK76, it was proposed to excavate a 50 x 50 foot block around Test Unit 3 to examine the structure and any associated trash features suspected to be in the vicinity. It was recognized that 40 x 40 and 50 x 50 foot blocks would possibly not be sufficient mitigation steps, and a cautionary statement that further excavation might be necessary was made. These recommendations were later downgraded in scope by IAS-Atlanta to one 10 x 10 foot excavation at 38BK75 and one 30 x 30 foot block at 38BK76 by IAS-Atlanta before mitigation began.

Site 38BK245 was not tested by SSI, and in fact, its importance had not been recognized until it had been badly damaged by excavation of a large borrow pit by construction contractors. On the basis of information supplied by IAS-Atlanta personnel and brief visits to the site during testing at the other sites, recommendations were developed for mitigation at the site. These recommendations were that a brick kiln and cellar recognized by IAS-Atlanta be excavated, and a large area of road ruts and other features be mechanically stripped and mapped since borrow pit activity had already completely stripped the topsoil. An hypothesized kitchen to the north of the borrow pit was to be left untouched by construction so that no recommendations concerning it were made at the time of the mitigation contract negotiations.

It was felt that 38BK245 represented part of the slave quarters and other areas of Curriboo Plantation, which was coeval with Yaughan Plantation (38BK75 and 38BK76). Since a brief reconnaissance of the site indicated large numbers of colonoware sherds and a high probability of structures and trash features, 38BK245 presented a control and base of comparison for Sites 38BK75 and 38BK76, especially in relation to a study of artifact and structural patterns.

Summary and Recommendations

Before testing began, it was thought that the five sites to be tested were mid-eighteenth to early nineteenth century plantations owned by Huguenots (38BK73, 38BK75, and 38BK76), an eighteenth century tavern (38BK88), and a nineteenth century farmstead (38BK91). Based on these conclusions, certain guiding questions or objectives were established for the project. Chief among them were to study the differences between French and British culture and economies on a local and regional level, to study the economic conditons and relationships of plantations and other site types such as taverns in the area and to study the overall significance of these sites to contemporary archaeological questions.

To these goals, SSI added several others: Was there enough material and adequate preservation at the sites to answer such questions? Could South's (1977a) artifact patterns be applied to the material? and Were there any structures around which to base South's pattern analysis?

It was proposed to conduct surface surveys, metal detector surveys, test excavations, and limited historical research to initially address the questions posed. Briefly, the conclusions of the testing phase indicated that two of the sites were badly disturbed and three deserved further investigation. Site 38BK88 was not a tavern and contained no structural or trash features. Site 38BK91 was not a farmstead, but rather a surface brick clamp, badly disturbed by pine plantation. Site 38BK73 had disappointingly few artifacts but appeared to be a special function structure. Later mitigation of 38BK73, discussed in this chapter, showed that the site included a tree-fall and a sparse field scatter of eighteenth to twentieth century debris. Sites 38BK75 and 38BK76 did indeed appear to be slave quarters, but they were not capable of answering questions of French ethnicity since it became apparent (later confirmed during mitigation) that the Huguenots in South Carolina had become acculturated into the Anglo-American mainstream before the establishment of the sites. A sixth site, 38BK245, was not tested by this project, but went directly to mitigation on the basis of work conducted by IAS-Atlanta (Figure 17).

Based upon the field results of the testing phase, it was expected that at least one structure and associated features would be present at 38BK75, at least two structures and associated features would be present at 38BK76, and a brick clamp, cellar, plantation outbuildings, and associated features were present at 38BK245. The stratigraphic integrity of Sites 38BK75 and 38BK76 was expected to be much better than at 38BK245.

Because the fundamental conclusions on the character of the sites changed as a result of testing, new research priorities needed to be established. These necessarily revolved around slaves and slave lifeways at Sites 38BK75, 38BK76, and 38BK245. It was proposed to examine the hypothesized status differences between the slaves at 38BK75 and 38BK76 by carefully excavating a structure and associated features at each site. Several patterns were expected to indicate status differences. Site 38BK75 was expected to have larger slave cabins, more furniture associated artifacts, and more non-local ceramics than Site 38BK76. It was proposed to examine the subsistence base of slaves at all three sites in order to compare this data on nutrition between sites and with that at nineteenth century slave sites in Berkeley County and coastal Georgia. It was also proposed to examine the technologies of simple plantation industries such as blacksmithing and fishing to compare with data from nineteenth century sites and the literature. It was further proposed to define colonoware ceramics found at the site and to identify the ethnicity of the makers and their manufacturing techniques. As will be seen below, these goals could not be met in all cases, and at the conclusion of the mitigation fieldwork they were again modified.

V. CURRIBOO, YAUGHAN, AND THE CORDES FAMILY

Introduction

In order to interpret the archaeological data recovered from Sites 38BK75, 38BK76, and 38BK245, and to relate the interpretation of this data to larger historical issues, a series of preliminary questions were posed and answered:

1. Who owned the plantations?
2. Who occupied them?
3. What was the function of the sites?
4. What was the nature of the occupation?
5. What crops were raised on the plantations?

The historical research was conducted with the archaeological investigation and was in a position to respond to questions that emerged as the archaeological analysis progressed. Therefore, as the extent of the artifacts relating to slave culture became apparent, questions relating to the history of slavery assumed major importance. In the meantime, a systematic search of repositories uncovered documents describing both plantations, members of the family, neighbors and neighboring plantations. The historical research then found itself in a position to answer specific questions and to describe the economics of the plantation and its impact on the slaves. It was also able to reconstruct detailed information about slave life and the relationship between the white family and the slave family.

Procedures

The questions asked were shaped not only by the requirements of the artifacts and the sites but also by the nature of the written evidence as it was uncovered. In its broadest outlines, the procedures for discovering sources and interpreting them followed the analytic/synthetic method. The problem was first broken down into its constituent parts, or constituent considerations (e.g., who owned the plantation), and then the interpretation of the project as a whole emerged as the constituent conclusions were linked to one another. In this way, for example, information on the viability of indigo and the development of cotton cultivation had meaning in the interpretation of the size and distribution of the black population on the plantation.

The procedure for identifying primary and secondary sources followed a parallel plan. General histories of South Carolina, Berkeley County and plantation agriculture were read to identify topics of special interest: rice, indigo, plantation economics, slavery, inheritance strategies and so on. More specialized secondary materials were then located. Having isolated the key individuals and the general location of the land, the research focused on identifying the land and people as fully as possible through primary, mainly archival, materials. As many primary documents as possible were located describing the Cordes family, the principal owners of the two plantations. Other documents that described the St. Stephen's Parish/Pineville district were carefully consulted so that reasonable inferences about the two plantations could be made when direct testimony was lacking. Research in the

primary and secondary sources informed each other so that historical issues directed attention in relevant channels while ongoing archival research refined perception of those issues. The relationship between this project and the scholarly literature and research in progress elsewhere therefore flowed naturally from this approach.

In addition to the conventional, written methods for accessing primary and secondary sources, individuals were also consulted at various points for their expertise in the field and their familiarity with the archives in the state. These individuals included Dr. George Rogers, Department of History, University of South Carolina; Dr. David R. Chesnutt, The Henry Laurens Papers, University of South Carolina; Mr. George Terry, Curator, Historical Collections, McKissick Museums, University of South Carolina; Mrs. Martha Bailey Burns, Librarian, Huguenot Society of South Carolina, Charleston; Mr. James Percival Petit, Isle of Palms; Mr. Elias Bull, Charleston; and Mr. Lucas Gailliard, Charleston.

Documents

Archival sources were located in several repositories and fall into different categories. Land records, used to establish chain of title, were found at the Register Mesne Conveyance, Charleston; Register Mesne Conveyance, Monck's Corner; Assessor's Office, Monck's Corner; and on microfilm at the South Carolina Department of Archives and History, Columbia. These records go back to the colonial period and include royal grants, warrants, conveyances, plats and deeds. Additional information on the transfer of land was found in wills.

Wills and inventories of personal property were tremendously useful. They supplied detailed information on what was on a plantation and identified key individuals. Inventories, moreover, listed slaves by name and price, which gave a clear picture of the slave community. Whether a given slave was a prime field hand or possibly a child could occasionally be inferred from the price relative to other prices. In the 1930s, many of these records were transcribed and typed by the Work Projects Administration. Original manuscripts, typescripts and microfilm of the records are available at several locations: Charleston Probate Court, Charleston County Public Library and the South Carolina Department of Archives and History.

The next block of documents concerned individual plantation records including ledgers, daybooks and account books. The Account Book of the Estate of John Cordes, which recorded Samuel Cordes' administration of John Cordes' estate, was a critical document, supplying more than ten years of continuous information on an estate that included Yaughan Plantation. Evidence from this source was confirmed by studies of account books belonging to other inhabitants of St. Stephen's and nearby St. John's, Berkeley. The John Cordes Estate Account Book is at the Library of the College of Charleston; other similar materials are located at the South Carolina Historical Society, Charleston, and the South Caroliniana Library, University of South Carolina.

Numerous other manuscripts were consulted, including court records, Revolutionary War records, marriage settlements, tax returns, federal and local censuses and the South Carolina Gazette, which began in 1732. This information was used to develop the context and to support inferences.

Summary of Ownership

Title searches were conducted for both Yaughan and Curriboo plantations in order to ascertain as much as possible the period in which these sites were settled and occupied. Although the title data alone did not establish these points, information was obtained from deeds, probate and personal records which outlined the parameters of occupation. In both cases, the plantations were worked out well after the period in which they had been occupied as discrete settlements. In the following summary, therefore, the discussion is confined to the period in which households were coterminous with economic units; complete title information has been presented in Appendix B. Figure 20 represents time line summaries of the data presented below and in Appendix B.

Yaughan Plantation

The earliest reference to Yaughan Plantation dates from 1737 (Figure 21). The 650 acre tract conveyed by Richard Allen to Edward Thomas, "known by the name of Yaughan", was part of a larger, 1200 acre tract. Thomas left this property to his son Samuel, who in turn sold it and the adjacent 596 acre property to Isaac Cordes in 1742. The two tracts became known as Yaughan Plantation, and although it is not clear whether Samuel Thomas developed the land, the inventory of Isaac Cordes' estate in August 1745 lists cattle, sheep, hogs, horses and some household goods at "Youshan" (Inventory of Isaac Cordes, 9 August 1745, Inventories 67:A:329).

Isaac Cordes left his real estate to his son John, who died in 1756. John Cordes left his real estate equally divided between his two sons, John and Thomas, who were both children. His brother-in-law and cousin, Samuel Cordes, became their guardian in 1756, and Yaughan appears to have functioned primarily as an indigo plantation under the daily supervision of a series of overseers (Account Book, Estate John Cordes, 1764-1798). John Cordes attained his majority in 1768, and although local tradition states that he inherited all of his father's property by law of primogeniture (Dubose n.d.:50-51), John Cordes clearly continued to administer Yaughan Plantation on behalf of his brother Thomas (Account Book, Estate of John Cordes, 1764-1798). In 1773, Thomas Cordes formally accepted his share of his father's estate from his uncle, and his brother John confirmed his title by deeding him half of their father's estate in what appears to have been a straw-man transaction.

Thomas Cordes had already begun to participate in local parish affairs, and, thus, he had probably begun to reside at least part of the year at Yaughan. Although he took an active role in the Revolutionary War, his name appears periodically in parish records through the 1770s. He married in 1784, and records of various neighbors in the post-war years indicate that he [illegible] indigo and rice seed, evidently to receive the plantation's prewar [illegible] despite changes in the indigo market, which put the American grower [illegible] at a severe disadvantage. He and his family continued to live at the [illegible]tion until his death in 1809.

AD-A148 985 VAUGHAN AND CURRIBOO PLANTATIONS: STUDIES IN AFRO-AMERICAN ARCHAEOLOGY(U) SOIL SYSTEMS INC MARIETTA GA T R WHEATON ET AL. APR 83 CX-5000-9-5950

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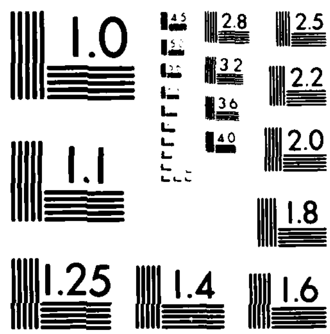

MICROCOPY RESOLUTION TEST CHART
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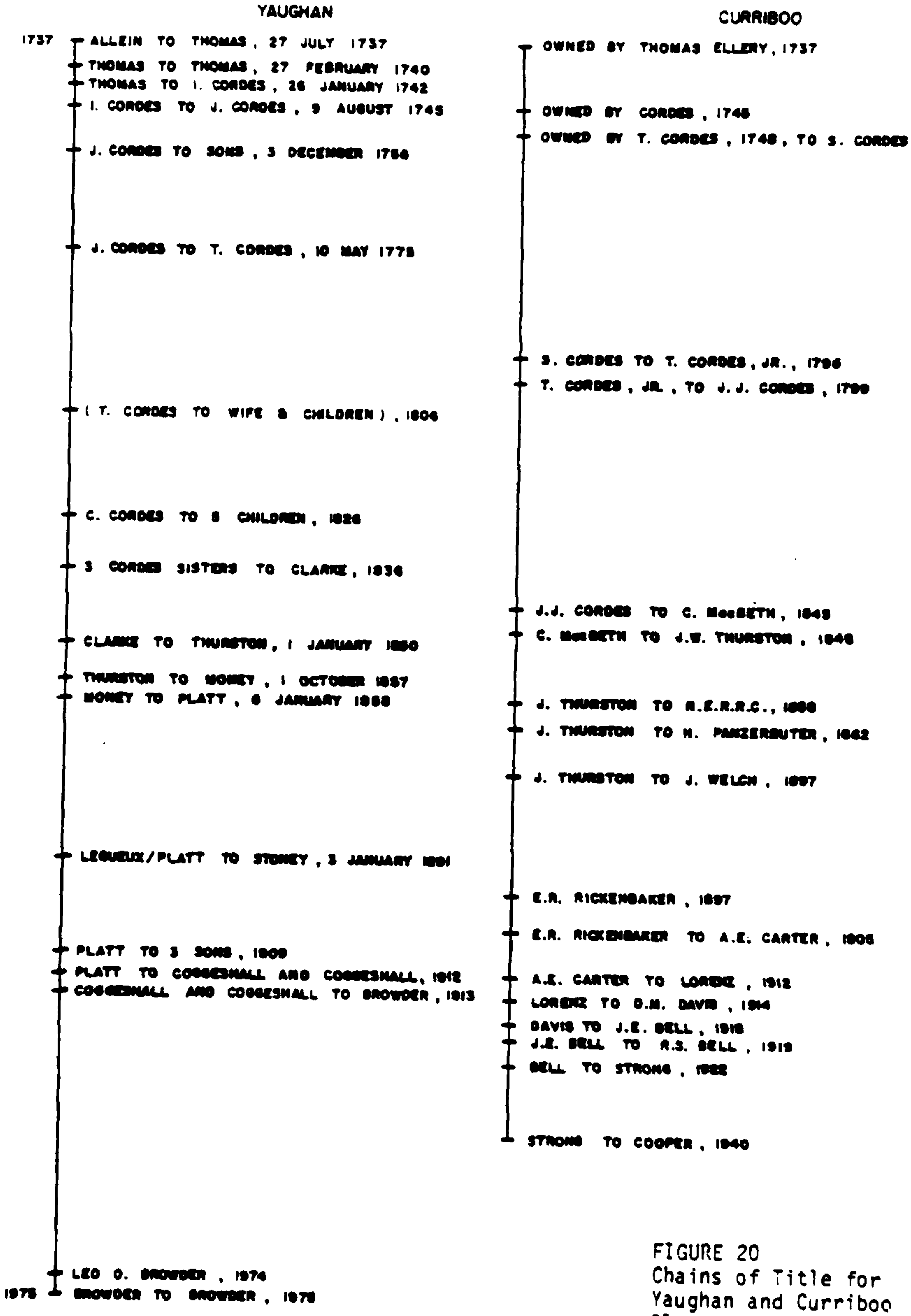


FIGURE 20
Chains of Title for
Yaughan and Curriboo
Plantations

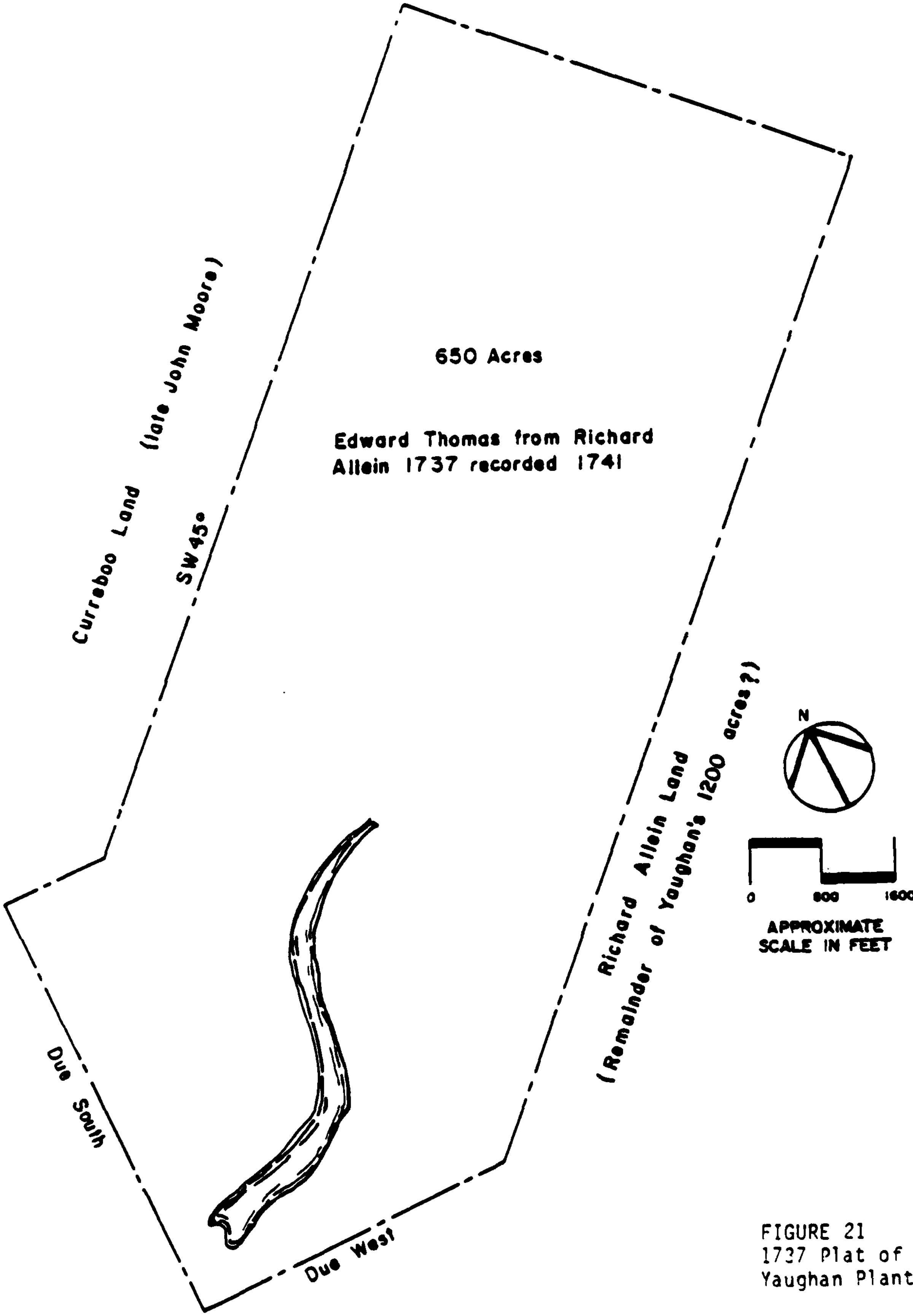


FIGURE 21
1737 Plat of
Yaughan Plantation

After he died, his widow and children began to live at least part of the year in nearby Pineville. His widow left the property divided equally among her children when she died in 1826, and ten years later, her three daughters sold their interest in Yaughan to Solomon Clarke. Clarke owned substantial real estate in St. Stephen's Parish and in adjacent St. John's, Berkeley, and it is not likely that he spent a great amount of time at Yaughan. In 1850, he sold the property to J.W. Thurston, who began to subdivide the property in 1857. The separate parcels changed hands several times over the next century and tended generally to decrease in size.

Curriboo Plantation

The plat affixed to the indenture conveying Yaughan from Richard Allein to Edward Thomas indicates land to the southeast of Yaughan described as "Curriboo Land: the late John Moore Esq" (Figure 21). According to the 1737 Allein/Thomas transaction, Thomas Ellery had acquired the land belonging to the late John Moore, who appeared to have owned both Yaughan and Curriboo at one point. Similarly, Ellery may have obtained all of Moore's estate and therefore, he too may have owned both plantations at one point. Ellery died the following year and left the vast majority of his real and personal estate to his wife Ann.

When Samuel Thomas sold Yaughan to Isaac Cordes in 1742, the description of the 650 acre tract referred to lands southeast of Yaughan "belonging to Isaac and Thomas Cordes" (Deed Book R-5:187). This is probably Curriboo, which Isaac Cordes and his brother Thomas, known as "Colonel Thomas Cordes", had acquired from Ellery or his estate. The 1745 inventory of Isaac Cordes' personal property lists slaves, livestock and "Sundries at Correboo between Coll Thomas Cordes and the Estate" (Inventory of Isaac Cordes, 9 August 1745, pp. 328-330). Although earlier references to the ownership of this plantation were oblique, the Cordes brothers had acquired Curriboo by 1745. Thomas Cordes died in 1748 and willed Curriboo, then consisting of 1390 acres, to his second son Samuel. Between 1745 and 1748, Thomas Cordes severed the relationship between Curriboo and his brother's estate, and his branch of the family became the sole occupants and owners of the plantation.

Samuel Cordes bequeathed Curriboo to his eldest son Thomas (d. 1799) in 1796. Thomas Cordes, also known as Thomas Cordes, Jr., to distinguish him from his cousin Thomas Cordes (d. 1806) who then resided at Yaughan, willed three plantations including Curriboo to his only son James Jamieson Cordes, who had been born only one year before his father died in 1799. He appears to have been brought up in Charleston primarily, and in 1845, he and his brothers-in-law, who were his attorneys, sold the 2255 acre Curriboo Plantation to Charles Macbeth. Four years later, Macbeth sold the entire tract to Robert Press Smith, who then began to divide the plantation.

In 1858, Smith sold 1300 acres to the North Eastern Rail Road Company. In 1862, he conveyed 930 acres, including the dwelling house (Figure 22) to H. Panzerbeither. Finally, Smith sold the remaining 30 acres of pineland to Jacob V Welch in 1871. A series of investors purchased portions of the plantation over the next decades and although the size of the parcels tended to decrease, the tracts did not become as small as those that represented constituent elements of neighboring Yaughan Plantation.

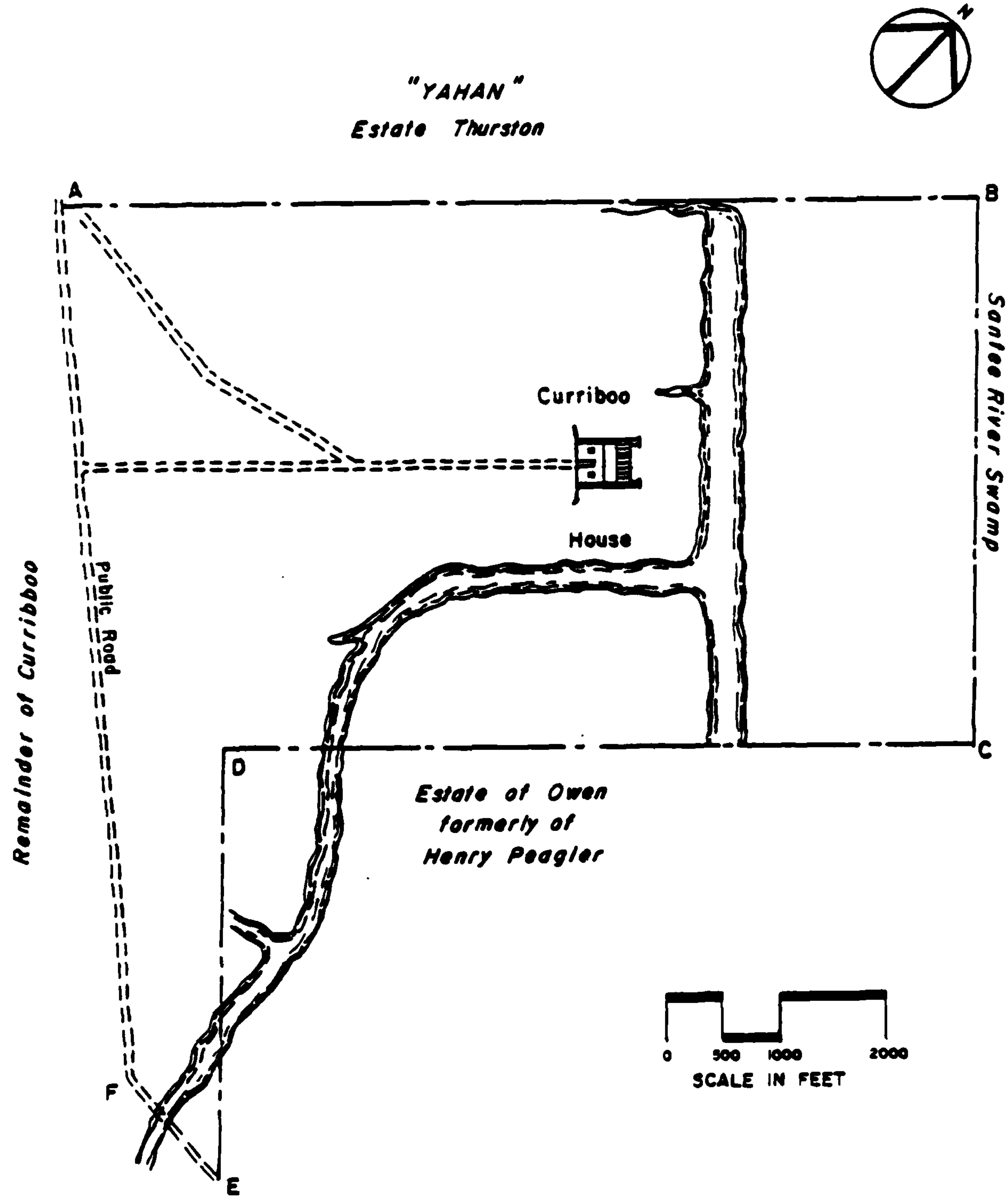


FIGURE 22
1862 Plat of
Curriboo Plantation

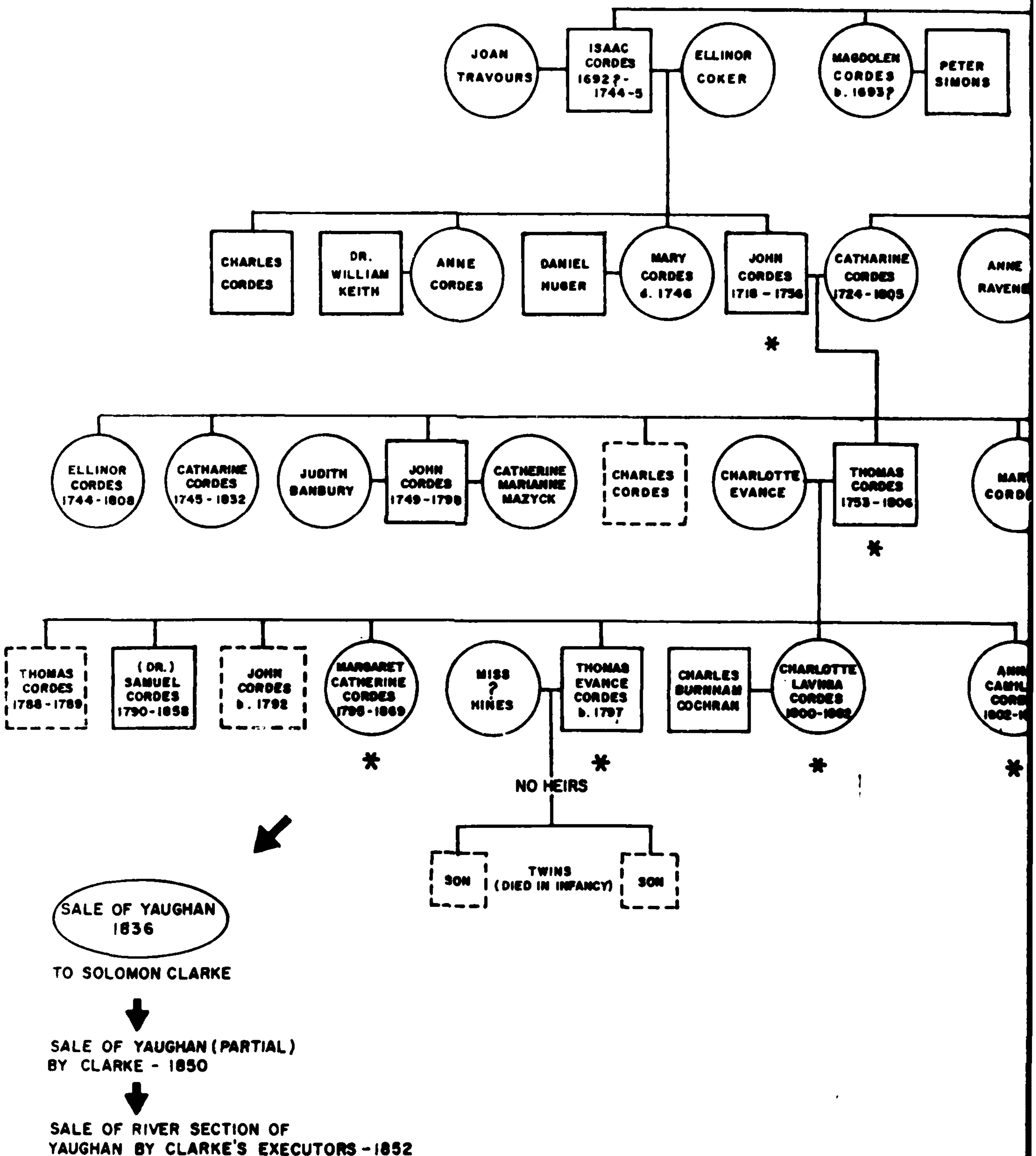
Cordes Family

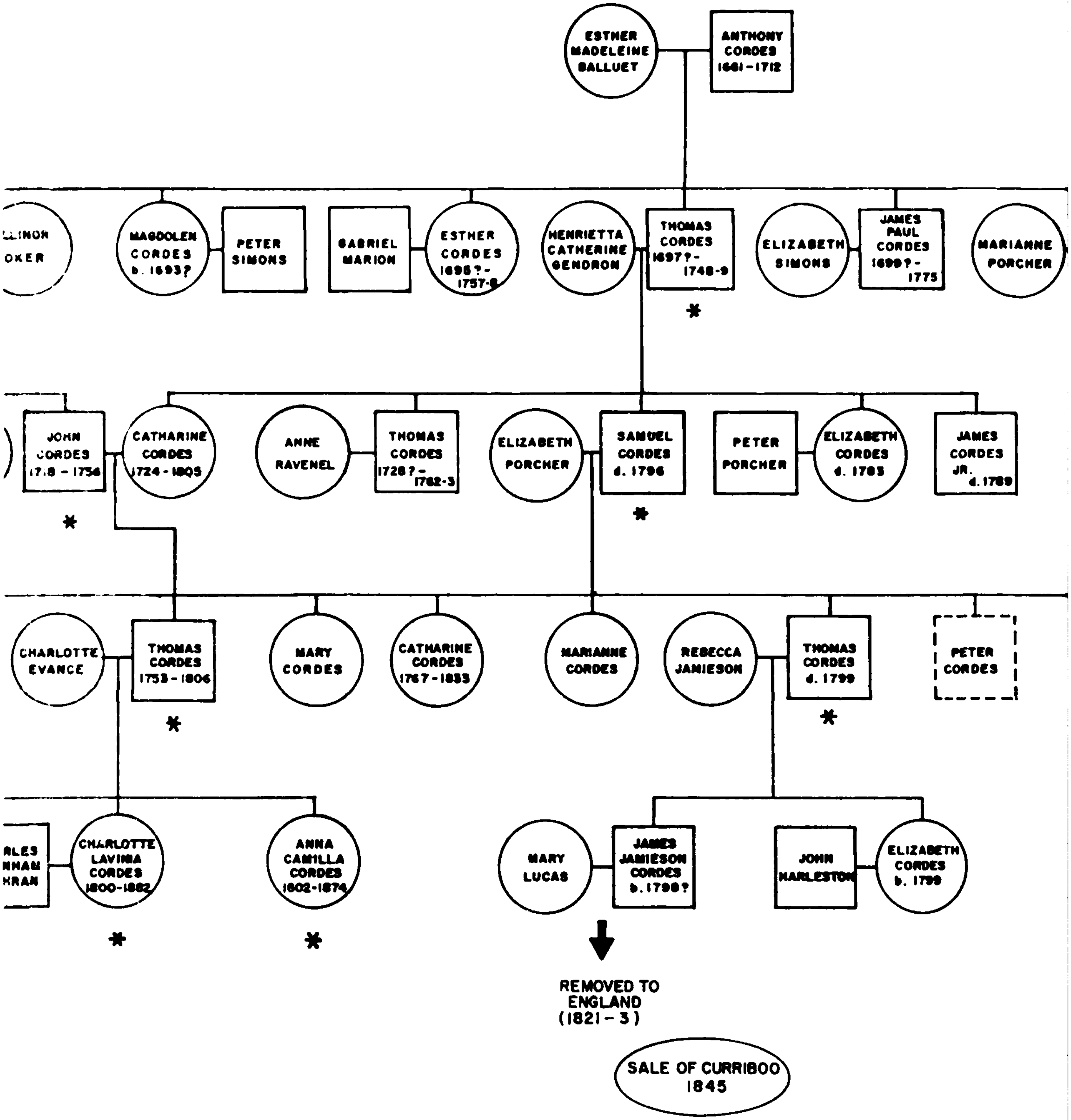
The Cordes family, which owned Curriboo and Yaughan in addition to extensive lands in St. John's, Berkeley, during the eighteenth and early nineteenth centuries, came to South Carolina in the late seventeenth century (Figure 23). Anthony Cordes (1661-1712), the progenitor of the South Carolina family, left France either just prior to the revocation of the Edict of Nantes in 1685 or just after it. Born to the bourgeoisie of Mazamet, Languedoc, in 1661, Anthony Cordes was educated a physician (Cordes 1974:86; Richardson 1942:133). References to Cordes and his wife, Esther Balluet, in Carolina date from 1696, and their three elder children; Isaac, Magdalen and Esther, were born in the colony prior to the formulation of the Huguenots' petition for naturalization believed to have been written in 1695 or 1696 (Thomas 1887:52). This suggests that Cordes and his wife probably migrated from Europe to Carolina between 1685 and 1692.

Anthony Cordes settled on the western branch of the Cooper River, in what became the Parish of St. John, Berkeley, either immediately upon his arrival or shortly thereafter. In 1706, he took out a warrant for lands adjoining the Watboo Barony line, and in 1709, he obtained a second warrant for 200 acres in Berkeley County at "three Mile head" (Richardson 1942:134). When he died in 1712, Anthony Cordes left his eldest son Isaac "my Plantation that I now live on Containing two hundred Acres of land, Together with Sixhundred [acres] of land Which I Cause to be measured Joyning the Said two hundred Acres of land" (Will of Anthony Cordes, 26 January 1711/12, recorded 22 February 1711/12, Record of Wills, Vol. 1, 1671-1724, pp. 37-38). The remainder of his real and personal property, including Indian and black slaves, he willed equally divided among his four sons and three daughters (Will of Anthony Cordes, 26 January 1711/12, recorded 22 February 1711/12, Record of Wills, Vol. 1, 1671-1724, pp. 37-38). Since his wife was not mentioned in his will, she is believed to have died prior to 1712.

His children continued to live in the vicinity of St. John's, Berkeley or in nearby rural parishes between the Cooper and the Santee Rivers. All four of his sons became planters, and his daughters married planters. Magdalen (b. 1693?) married, for a second time, Peter Simons, a planter in the Parish of St. Thomas and St. Denis, which was situated on the eastern branch of the Cooper. Esther (1695?-1757/8) married Gabriel Marion, a planter in St. Thomas and St. Denis, and Anne (1703?-1772) married Peter Simons' brother Francis, also of the Parish of St. Thomas and St. Denis. James Paul Cordes (1699?-1775) married Peter's sister Elizabeth and took up lands in St. John's, Berkeley. Francis Cordes (1701?-1743?) married Marianne Porcher of St. John's Berkeley and settled a plantation on Wassamassaw Swamp. Thomas Cordes (1697?-1748/9) married Henrietta Catherine Gendron, whose family was influential in the neighboring parish, St. James, Santee, Craven County, and Isaac Cordes (1692?-1744/5) married first Joan Travours of Barbados and secondly Ellinor Coker, also of Barbados (Richardson 1942:135-139).

CORDES FAMILY TREE





* INDICATES PEOPLE WHO OWNED PROPERTY AT CURRIBOO OR YAUGHAN

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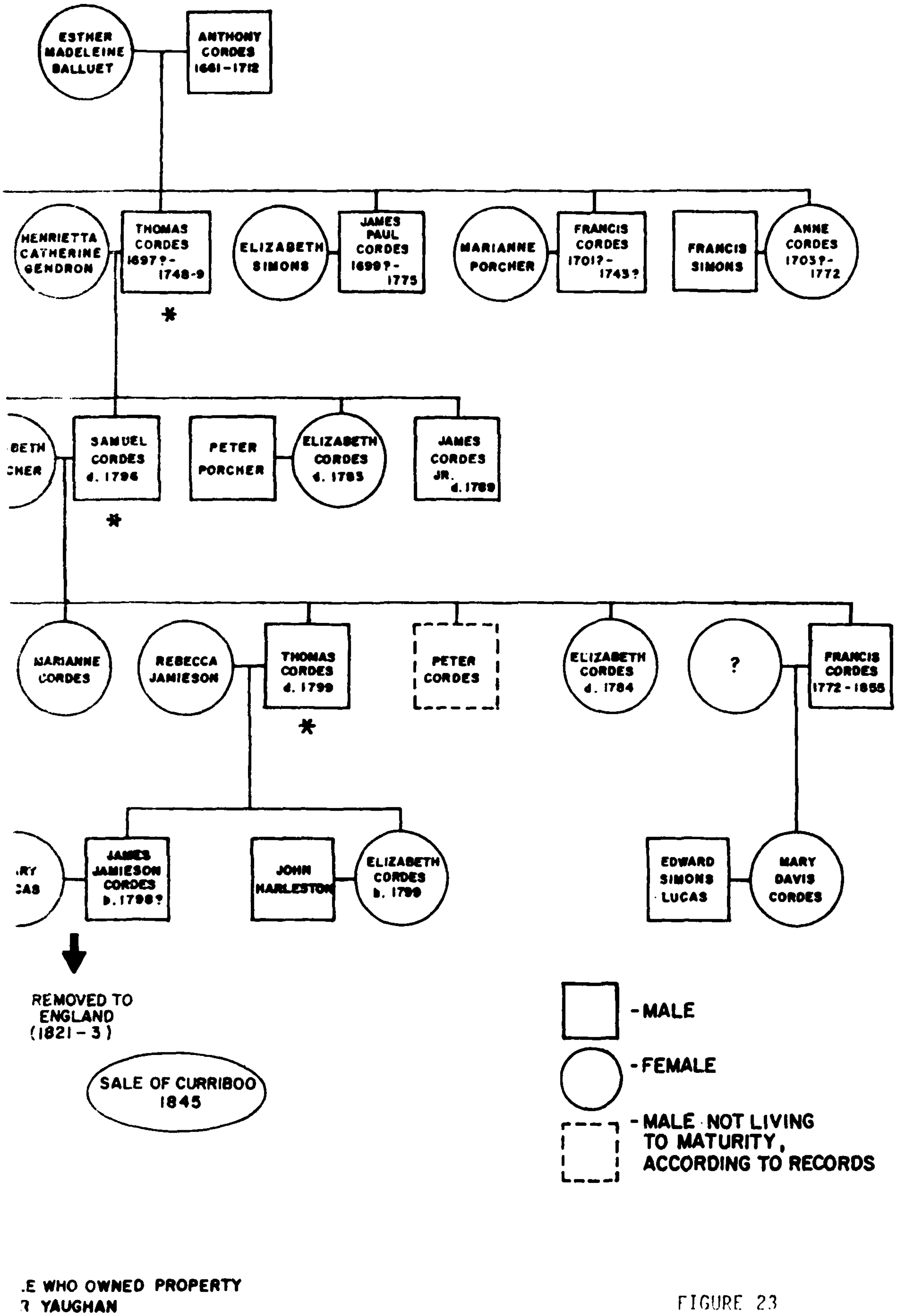


FIGURE 23
Cordes Geneaology

Isaac Cordes' marriages suggest the possibility of commercial links beyond the colony. Carolina's early development was tied to social and economic changes on Barbados, and through the colonial period, the trading nexus between the West Indies and Charleston was a significant element in the colony's growth (Sirmans 1966:58). Thomas Cordes (1697?-1748/9) witnessed Thomas Ellery's will. Ellery lived in Charleston and clearly speculated in lands and engaged in transactions conducted through the Carolina Coffee House in London (Will of Thomas Ellery, 2 October 1738, recorded 7 March 1738/9, Record of Wills, Vol. 4, 1736-1740, p. 116). This suggests that Thomas Cordes (1697?-1748/9) also pursued a varied set of economic enterprises. Thus, it is not inconceivable that both Isaac and Thomas (1697?-1748/9) Cordes were planters with additional, significant economic interests.

The Cordes brothers' numerous land transactions in the early 1740s in the vicinity of English Santee, which became the Parish of St. Stephen in 1754, are consistent with patterns in land speculation. The Cordes family was, moreover, one of six families in St. John's, Berkeley, that lived in the parish throughout the entire colonial period. These elite families achieved their status through acquisition of land on which to settle children and grandchildren and through carefully planned marriages (Terry 1981:III:19, 21, 24, 37). English Santee was in the process of settlement in the 1730s and 1740s. The timing of the purchase of Yaughan and Curriboo lends credence to this inference, which, in turn, suggests that both properties were acquired initially as speculative property but were kept as future security for the family. Both Isaac and Thomas (1697?-1748/9) Cordes identified themselves as residents of Berkeley County, adding further evidence that properties toward the Santee River were ancillary to their primary operations. Although Isaac Cordes was vague in his reference to real estate, Thomas Cordes (1697?-1748/9) detailed the division of his extensive holdings to his three sons:

> I give Devise & bequeath unto my said Son Thomas Cordes. . .all that my Plantation commonly called Whiskinboo which I bought of Peter Allston & others containing in the whole about three thousand acres of Land. . . situate in Craven County. . .As also all that my Plantation containing about One hundred and Ninety Acres of Land. . .situate in Berkeley County. . .butting & bounding on the Lands of my Brother James [Paul] Cordes, As Also all that my Corner Lot of Land seituate in Childsbury Town on Cooper River & lying appositite to Lloyds Corner Lot. . .I give Devise & bequeath unto my said Son Samuel Cordes. . .all that my Plantation commonly called Correboo containing about One Thousand three hundred & ninety acres of Land. . .seituate in Craven County. . .As Also all that my other Town Lott of Land, seituate in Childsbury Town as aforesaid, adjoyning to the Corner Lot herein before Devised my said Son Thomas Cordes. . .I give Devise and Bequeath unto my said Son James Cordes & to his heirs & assigns for Ever. . .all that my Plantation where I now live [in Berkeley County] consisting of Two Tracts containing togeather about Eight Hundred Acres of Land. . . .

(Will of Thomas Cordes [1697?-1748/9], 25 April 1748, recorded 21 April 1749, Record of Wills, Vol. 6, 1747-1752, pp. 142-143).

Like Anthony Cordes before him, Thomas Cordes (1697?-1748/9) saw several of his children married within an expanding kinship nexus and wedded to individuals from the area between the Cooper and the Santee. Samuel Cordes (d. 1796) married a maternal first cousin, Elizabeth Porcher, daughter of Peter and Charlotte Marianne Gendron Porcher. His sister Elizabeth (d. 1783) married another first cousin, Elizabeth's brother Peter Porcher, who eventually settled Peru Plantation in St. Stephen's Parish. Thomas' (1697?-1748/9) eldest son, Thomas (1728?-1762/3), married outside the kinship circle, but within the county; he married Anne Ravenel of the powerful Berkeley County family. Thomas' (1607?-1748/9) eldest daughter, Catharine (1724-1805), married her first cousin, John Cordes (1718-1756), who was Isaac Cordes' only surviving son. (A second son, Charles, apparently predeceased his father.)

In what was most likely another arranged marriage, Isaac's elder daughter Mary married Daniel Huger, whose family was prominent in St. James, Santee. Isaac's other daughters, Esther and Anne, were apparently single at their father's death; Anne married a Dr. William Keith, and Esther married first the Reverend Daniel Dwight and then James Keith (Richardson 1942:135, 140-141). Thus, through judicious marriages, the Cordes family consolidated and expanded its control of lands in Berkeley County and began to repeat the process in their newly settled lands in the neighboring Parish of St. James, Santee, which then included the future Parish of St. Stephen.

John Cordes (1718-1756) died less than 15 years after his father's death. His sons were children at his death; Charles died prior to 1756, since he is not mentioned in his father's will, but John (1749-1798) and Thomas (1753-1806) lived to maturity. John Cordes' principal residence was clearly in St. John's, Berkeley, where he willed his wife Catharine both her residence and "the Liberty of Planting" during her widowhood (Will of John Cordes, recorded 3 December 1756, Record of Wills, Vol. 7, 1752-1756, p. 582). He divided his real estate equally between his sons but stipulated that his personal property including slaves, harvested crops and livestock was to be divided equally among his children, after his wife's one-sixth was withdrawn (Will of John Cordes, recorded 3 December 1756, Record of Wills, Vol. 7, 1752-1756, pp. 582-583). He named Thomas (1728?-1762/63), Samuel (d. 1796) and James Cordes, his cousins and brothers-in-law, among his executors whom he requested to maintain his estate in order to support his family. Thomas Cordes (1728?-1762/3), the eldest, apparently took charge of the estate at John's death; records surviving of Samuel Cordes' administration begin in 1764, which is within one year of Thomas Cordes' (1728?-1762/3) death (Will of Thomas Cordes, 22 May 1762, recorded 6 July 1763, Record of Wills, Vol. 10, Book B, 1760-1767, pp.450-452).

Samuel Cordes (d. 1796) was himself a successful planter, with several holdings in St. John's, Berkeley and in St. Stephen's, and on the north side of the Santee River. He was prominent in parish politics, serving on the vestry of St. Stephen's in 1754, when it was incorporated (Misenhelter 1977:1, 6). Because his two brothers died without children, he fell heir to their extensive properties. Consequently, when he died in 1796, his estate included five separate plantations and 408 slaves; his personal property was appraised at ₤ 22778. Recent estimates of wealth distribution for South Carolina at the conclusion of the colonial period put the mean value for the entire colony in the period 1757-1762 at ₤ 6039 and the mean value for St. John's, Berkeley, at ₤ 5911. Planters in the colony averaged ₤ 17492, and clearly Samuel Cordes was among the wealthier individuals in the state, even in this category (Bentley 1977:76-77).

Neither John (1749-1798) nor Thomas (1753-1806) Cordes achieved the same degree of success that their uncle did. John received his share of their joint inheritance in 1768, and in 1774, he leased Yaughan Plantation, among other tracts, to his younger brother Thomas (1753-1806). The following year, "for and in Consideration of the natural love and affection which he hath for his Brother the said Thomas Cordes and also for and in consideration of the sum of Ten shillings Lawful current Money of the Province," John Cordes (1749-1798) conveyed Yaughan and two other tracts to Thomas (1753-1806), in the exchange discussed above (John Cordes to Thomas Cordes, Release of Three Tracts of Land, 10 May 1775, Deed Book, R-5, p. 194, RMC).

John Cordes (1749-1798) married twice; first, to Judith Banbury and then to Catherine Marianne Mazyck, whose father, Stephen Mazyck, was a prominent planter in St. John's, Berkeley, and whose mother, Susanna Ravenel, was another member of the influential Ravenel family. John Cordes (1749-1798) was active in revolutionary politics, serving as a receiver of flour and rice and as a member of the House of Representatives for St. John's. He later purchased Peru Plantation and moved to St. Stephen's Parish (Richardson 1942:149-150).

Thomas Cordes (1753-1806) was very young when his father died, and the accounts that his uncle kept document in surprising detail his early education. He was educated largely in Charleston and given the training of a young gentleman, complete with French and dancing lessons (John Cordes Estate, Account Book 1764-1798, pp. 44, 53, CC). He was clearly on the verge of pursuing the elite life of a planter when the Revolutionary War intervened. According to family tradition, he narrowly escaped hanging by asking time to smoke one last pipe. In the interim, his brother-in-law Theodore Gaillard obtained a pardon for him from Lord Cornwallis. Thomas Cordes (1753-1806) was probably associated with Francis Marion's brigade. Marion was a cousin, who later settled Belle Isle Plantation in St. Stephen's (Richardson 1942:144-145), and was supplied during the war at various of the Cordes' plantations. In 1781, Marion's brigade made camp on one of James Cordes' plantations and purchased from him beef, pork, peas, corn and potatoes (AA 1481, Records of the Comptroller General, pp. 1RR-17RR, SCDAH), forage for the horses and rice. In 1782, Samuel Cordes supplied hogs, cattle and horses to Marion's troop (AA 1482, Records of the Comptroller General, pp. 1TT-8TT, SCDAH). Additionally,

both Samuel and Anne Cordes (Thomas Cordes' [1728?-1762/3] widow) loaned money to the government to support the war effort (AA 1480, Records of the Comptroller General, pp. 1qq-4qq). After the war, Thomas Cordes (1753-1806) was a member of the House of Representatives and participated in the state Constitutional Convention in 1790. He married Charlotte Evance of Charleston in 1784 and resided at Yaughan in St. Stephen's Parish until his death in 1806.

By the late eighteenth century, St. Stephen's Parish was virtually a matrix of related families (Friedlander 1979:285-286). At the turn of the century, however, the old colonial families began to disappear through the consolidation of lands, which closed out families, and because of movement of later generations elsewhere. Samuel Cordes (d. 1796) left several plantations in St. John's and St. Stephen's Parishes as well as in other parishes to his two sons, Thomas and Francis (1772-1855). Both of his sons became planters. Thomas died in 1799, leaving one son and one daughter. His brother, Francis Cordes married and had one daughter, Mary, who married into the Lucas family. Her first cousin, James Jamieson Cordes (b. 1798?), the son of Thomas (d. 1799) and Rebecca Jamieson Cordes, also married into the Lucas family, thus perpetuating the custom of marrying children into a limited number of families. Yet the land had ceased to be the most significant determinant in forging family alliances. Thomas Cordes (d. 1799) had married into the Jamieson family, which was a mercantile family that had had a standing economic relationship with the Cordes. James Jamieson Cordes left South Carolina to join his wife's family in England in 1823 in order to pursue a rice processing enterprise and then to build a nail factory (J. J. Lucas to Robert Wilson 1905, p. 92; Lucas Family Papers, 1792-1796, SCHS). The sale of Curriboo in 1845 was part of a process in which he first turned property in South Carolina over to an attorney and then divested himself of it entirely. His sister Elizabeth married John Harleston in 1819. Harleston interested himself in running Cordes family enterprises as well as those of his own family, and was a party to the sale of Curriboo in 1845 (Title, 10 June 1845, Deed Book V-11, p. 45, RMC).

Yaughan Plantation left the Cordes family under somewhat different circumstances. Thomas Cordes (1753-1806) and Charlotte Evance Cordes had seven children, five of whom lived to adulthood. Thomas Cordes (1753-1806) encountered hard times and was sued for bad debt in 1788 (George Bedon v. Thomas Cordes, Senior, 18 February 1788, Court of Common Pleas, Judgment Rolls, 1791-1910, SCDAH). Between 1790 and 1798 he sold off 24 slaves, which implies a decline in the viability of his operations (Thomas Cordes to Timothy Ford and William Henry DeSaussure, 11 March 1790, Miscellaneous Records, Vol. ZZ, p. 137; Thomas Cordes to Catharine Cordes [1798], Miscellaneous Records, Vol. LLL, p. 40, SCDAH). In 1800, he sold 15 slaves to his sister-in-law Margaret Cantey, who held them in trust for his wife, Charlotte (Miscellaneous Records, Vol. OOO, pp. 270-272, SCDAH).

After his death in 1806, Thomas Cordes' widow and five children apparently went to live in Pineville, at least part of the year. Charlotte Cordes was assessed taxes on a lot in Pineville in 1824 (Return of Charlotte Cordes, 17 March 1825, Comptroller General, Tax Returns, St. Stephen's, 1824, SCDAH).

In her will, she left "the use of my house and Lott in Pineville as a home" to her three daughters: Margaret Catharine, Anna Camilla and Charlotte Lavenia (Will of Charlotte Cordes, 12 June 1826, recorded 27 February 1827, Record of Wills, Vol. 37, 1826-1834, p. 240). In 1832, a "Miss Cordes" was listed as a head of household in a census of the town taken that year (Census of Pineville, 1832, Thomas Porcher Ravenel Papers, SCHS). Samuel Cordes (1790-1858) was a member of the Pineville Police Association in 1824, an agency organized in response to the threat of slave rebellion ignited by the Denmark Veysey scare (Pineville Police Association, Records, 1823-1843, SCHS), but he ultimately moved to St. James, Santee. When he died in 1858, he described himself as a "Planter also Physician of St. James, Santee" (Will of Samuel Cordes, 24 March 1841, recorded 19 August 1858, Record of Wills, Vol. 48, 1856-1862, p. 162). Thomas Evance Cordes (b. 1797), the fifth child of Thomas (1753-1806) and Charlotte Evance Cordes, was briefly married but evidently died without heirs shortly after his mother's death in 1826. His estate was assessed at 1585 acres in 1825, but he was taxed for only 10 slaves (Return of Thomas E. Cordes, 17 March 1825, Comptroller General, Tax Returns, St. Stephen's, 1824, SCDAH). Either he leased the land and lived from the rents, or he leased slaves and worked the land himself, since 10 slaves would have been inadequate to work 1000 acres.

Thomas Evance Cordes had died by 1840, since the federal census that year shows three white women in a household headed by M. C. Cordes (presumably Margaret Catharine) in the Parish of St. Stephen between the ages of 40 and 50. The household at that point included 15 slaves ranging in age from under 10 to over 55 (U.S. Census Office, Sixth Census, 1840, Enumerators' Manuscript Reports, South Carolina, microfilm). Charlotte Lavenia married Charles Burnham Cochran in 1842, and the federal census of 1850, which enumerated individuals separately, showed three women in the Cordes household: M. Catherine Cordes, aged 53, the head of household who reported $700 worth of real estate (evidently the house in Pineville); A. Camilla Cordes, aged 48; and A. Carlisle Key, a white woman aged 60 (U.S. Census Office, Seventh Census, 1850, Enumerators' Manuscript Reports, South Carolina, microfilm). Ann Carlisle Key, evidently an old friend of the family, had been left six shares in the state bank by Charlotte Cordes when she died, and had come to live with Charlotte's spinster daughters between 1840 and 1850 (Will of Charlotte Cordes, 12 June 1826, recorded 27 February 1827, Record of Wills, Vol. 37, 1826-1834, p. 239).

Between 1814 and 1836, Charlotte Cordes and her daughters sold off 46 slaves, and in 1850, Margaret Catherine was assessed for only 18 slaves. She and her sisters evidently retained enough slaves to run the household and probably to rent out to neighbors for income, but they sold a large block of slaves to Solomon Clarke in 1836, the same year that they sold him their shares in Yaughan (M. Catharine Cordes to Solomon Clarke, 1836, Miscellaneous Records, Vol. 5Q, p. 239, SCDAH; Title, 1 January 1836, Deed Book M-10, pp. 221-223, RMC). It is likely that they also supported themselves from capital investments. In 1836, Charlotte Lavenia Cordes held a mortgage from William Cain of St. John's, Berkeley (Mortgage, 1 January 1836, Miscellaneous Records, Vol. 5R, p. 147). In the same year, Catharine Cordes held Solomon Clarke's note for $13,300 (Mortgage, recorded 28 March 1854, Miscellaneous Records, Vol. 5R, p. 146).

Solomon Clarke had been born in St. Stephen's Parish, where he had extensive holdings. In the U.S. Census of 1840, he possessed 166 slaves (U.S. Census Office, Sixth Census, 1840, Enumerators' Manuscript Reports, South Carolina, microfilm). Ten years later, he reported real estate valued at $40,000. By that time, he had moved to St. John's, Berkeley where he died (U.S. Census Office, Seventh Census, 1850, Enumerators' Manuscript Reports, South Carolina, microfilm; Will of Solomon Clarke, 26 October 1850, recorded 11 November 1850, Record of Wills, Vol. 45, Book A, 1845-1851, p. 771). In his will, he directed his executors to settle his debts before proceeding with the division of his estate. The sale of Yaughan in January 1850, which had become of marginal importance as the move from St. Stephen's to St. John's, Berkeley attests, may have been part of the decision to abandon St. Stephen's in an effort to clear his estate from debt. The sale of the river section of Yaughan in 1852 by his executors was explicitly done to facilitate settling the estate (Title, 9 March 1852, Deed Book V-12, p. 619, RMC).

The tracts changed hands many times over the succeeding years, and the names lingered to designate acreage rather than to signify a family's residence/plantation. "Plantation" in the sense that it meant a household that was coterminous with a unit of production ceased to describe these plantations when the members of the Cordes family moved away in the first half of the nineteenth century.

VI. MITIGATION METHODS

Introduction

The mitigation phase of the historic sites at Cooper River began on May 14, 1979 and ended on October 19, 1979, for a total of 23 weeks. Until the week of August 13, the crew consisted of the Field Director, Thomas R. Wheaton, Jr., his assistant, Christine Johnson, and three crew members. The washing laboratory kept a sixth person occupied. Between August 13 and September 14, the crew was expanded to 14 members in the field to provide sufficient manpower to complete the large stripping and mapping operations at Sites 38BK75 and 38BK76. Again, during the week of October 8, 1979, the crew was expanded to handle the emergency work conducted at a brick structure at Site 38BK245.

Archaeological Field Methods

Archaeological mitigation of the four sites in question can be broken down into several tasks: controlled surface collections, hand excavated blocks, machine stripping, and large scale mapping. Controlled surface collections at Site 38BK75 was completed during the testing phase. At Sites 38BK76 and 38BK245 controlled surface collections were made during the mitigation phase. Hand excavated blocks were employed at all three sites where such a technique would provide the most data, most efficiently. In conjunction with hand excavation, machine stripping of large areas was also conducted. As part of the stripping operations, all features were mapped and all trash features either profiled and completely excavated or profiled and only half excavated.

The surface collection methods used at Sites 38BK76 and 38BK245 differed. Site 38BK76 had not been significantly impacted by agriculture or logging activity, except where logging roads cut into subsoil. Before controlled collections could be made, it was necessary to clear the site of trees and piles of brush and branches left by the most recent logging (Figure 24). This was accomplished by a bulldozer, which was also used to uproot and clear trees smaller than eight to ten inches in diameter. The action of the bulldozer treads also aided in breaking up the root mat. After clearing with the bulldozer, a garden tractor was used by an archaeologist to disk the entire site, breaking up the root mat more completely and turning over the soil to a depth of one to two inches. Three separate surface collections were then made, the first immediately after disking, the second after dampening the site using a water truck, and lastly after a heavy rain. The first collection produced the greatest number of artifacts, and successive collections produced fewer artifacts.

The sample size decided upon in consultation with IAS Atlanta was 10 percent. It was further decided to set up a stratified random sample strategy whereby 100 foot square quadrats were divided into one hundred 10 foot by 10 foot units and a random sample of ten 10 foot x 10 foot units was chosen in each 100 foot quadrat (Figure 25). This assured a random sample while dispersing the 10 foot by 10 foot units across the site (Figure 24). Artifacts within a 100 foot quadrat, but not in one of the selected 10 x 10 foot units, were collected and designated as coming from the general collection of the 100 foot quadrant. In retrospect, it seems evident that 100 percent of the site could and should have been collected using the 10 x 10 foot units.

SITE 38BK76, LOOKING EAST, MITIGATION PHASE SURFACE COLLECTION

SITE 38BK76, LOOKING NORTHWEST, AFTER MECHANICAL STRIPPING

SITE 38BK245, LOOKING EAST, BEFORE ARCHAEOLOGICAL MECHANICAL STRIPPING

FIGURE 24
Photos of Field Methods
at Sites 38BK76 and Site 38BK245

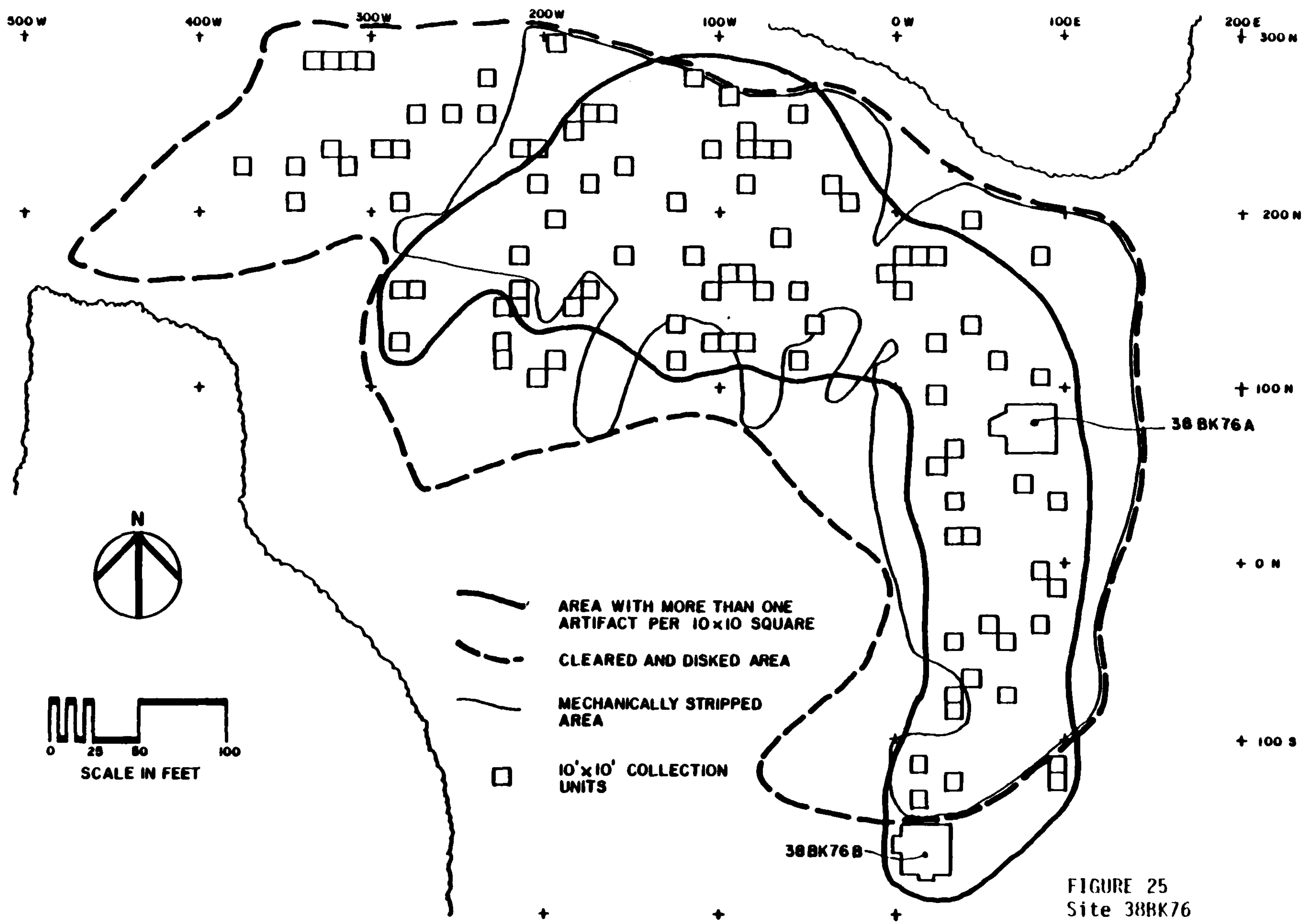


FIGURE 25
Site 38BK76
Collection Strategy

The method used in the field to locate the 10 x 10 foot units was relatively simple. A 100 foot grid was surveyed using a transit, and stakes were placed at the corners. To locate the 10 x 10 foot units within the quadrats tapes were stretched along parallel sides of the quadrats and a third tape was stretched between and perpendicular to them. Using a map with the randomly selected units shown on it as a guide, the third tape was moved across the quadrat. As one side of a designated unit was reached, its corners were measured out from one of the two parallel tapes along the third tape and flags were placed at the corners thus measured. This method was quick and efficient. The flagged units were then intensively and completely collected.

It was impossible to use those data to compare collecting success under dry, water truck wetting, and rainfall wetting conditions as had been hoped, since some of the bags from the three separate collections within individual units were accidentally mixed. All surface collection figures represent the total of all three collections in each 10 x 10 foot unit.

The surface conditions of Site 38BK245 differed greatly from Site 38BK76. Site 38BK245 had been heavily impacted by stripping of the topsoil before mitigation began, and as a result very little horizontal integrity remained. The collection strategy was adapted to these differing circumstances with the expectation that artifact patterning would not be as useful as it was expected to be at 38BK75 and 38BK76. The collection strategy at 38BK245 involved setting up a 50 x 50 foot grid and intensively collecting all artifacts within each 50 x 50 foot square. The result of this effort was to provide whole site artifact totals for comparison with other slave quarter sites.

Hand Excavations

As noted above, all three sites included hand excavated blocks as part of the mitigation effort. Site 38BK75 had the equivalent of a little over a 40 x 40 foot block; 38BK76 had two 30 x 30 foot blocks; and 38BK245 had one 30 x 30 foot block. A 30 x 30 foot block was usually sufficient to completely excavate a house plus associated features. The blocks were excavated in ten foot units.

Placement of the blocks depended upon surface indications and the results of testing. A feature found during testing at 38BK75 was to be excavated. House posts found during testing at 38BK76 were to be followed to expose the ground plan; and at 38BK245, a surface brick feature and hypothesized structure were examined.

Essentially, the same set of excavation and recording techniques were used at all four sites. Upon laying out a grid, the units were opened leaving six inch baulks (adjacent six inch baulks resulted in 12 inch baulks between excavated units). Natural stratigraphy was used throughout the general unit excavation. As each level was completed, elevations, black and white and color photographs, and measured drawings were made, and a square level form was filled out. All soil, except sterile red clay subsoil and approximately half of the root mat at 38BK76 was dry screened through 1/4-inch mesh. Soil samples containing approximately two gallons of soil were taken at each level from representative units across the block. The total number of soil samples

taken from excavation levels and features was 71 at 38BK75, 212 at 38BK76, and 177 at 38BK245. Together, these samples weighed over 3,235 pounds (1.6 tons) after drying.

After all units selected for excavation were excavated, the baulk profiles were drawn, the baulks removed, and the entire floor drawn and photographed. Units were usually considered completed at about one to two inches above the red clay subsoil, once structural features had become clearly outlined and the light sand soil horizon above the subsoil ceased to yield artifacts.

After drawing the floor, the trash and other large features in the units were profiled and excavated in two halves and in one to several natural or artificial levels. Postholes were excavated and post shape noted. Postmold outlines did not usually become apparent until two or three inches had been carefully excavated from the postholes. In almost all cases, a postmold was found upon excavation. Plans and profiles were drawn of each feature excavated, except postholes which were excavated and drawn in plan only. Soil from postholes was kept separate from postmolds. Photographs were taken and feature forms filled out on each excavated feature. Final photographs were again taken of the entire block after it had been cleaned and the features removed.

Records of photographs, soil samples and artifact bags by unit, level, and feature were maintained in separate notebooks. Square level forms, feature forms, and maps were maintained in separate files.

Mechanical Stripping

Sites 38BK75 and 38BK76 were mechanically stripped of topsoil to approximately one to two inches above subsoil to expose features. This was accomplished after the surface collections and block excavations indicated the horizontal and vertical extent of the sites. Site 38BK245 was mechanically cleared and then shovel shaved of a thin layer of water laid soil and rills left by previous stripping. Machinery was rented from construction contractors working on other portions of the canal, and the scheduling of equipment and skill of the operators shifted constantly, although generally speaking, once the operators understood their task, they did their job well.

At 38BK75, a bottom loading pan was used to strip off the area immediately around and to the north of the excavated block. This machine offered the advantage of removing the soil without digging in or spinning its tires, and it did not leave rills. At 38BK76 a motor grader was used since this machine was more maneuverable (necessary to avoid the stumps). At 38BK245 it was the only piece of equipment available. The disadvantages of the motor grader were that it frequently spun its tires if too much soil was removed at one time, and it had a tendency to leave rills. After the major portion of stripping was completed, a small garden tractor with a draw blade was used to clean up loose dirt and aid in shovel shaving. All areas mechanically stripped were then shovel shaved by hand to fully expose features and provide a clear, even surface. Artifacts collected during stripping were collected and added to the general artifact collection for the site, although such artifacts were not be used for intra-site or inter-site analysis.

Various methods were used for mapping during the project, from direct transit readings of bearing, distance, and elevation to perpendicular measurements from unit walls and stakes. However, the most extensively used mapping technique was triangulation. After baulks were cleared in blocks and after portions of stripped areas were shovel shaved, any missing grid stakes were replaced with the transit. In areas of high feature density, intermediate gutter spikes at 25 foot to 50 foot intervals were sighted in. Using tape measures, all features were mapped by pulling from two known points on the grid. A crew of three, two tape pullers and one draftsman, were thereby able to rapidly and accurately map large areas of high feature density. All parts of features were mapped by triangulation except for postholes, where the center was triangulated and the dimensions measured. This resulted in many sectional maps of each site at a scale of 1 inch equals 5 feet. A better scale might have been 1 inch = 2 feet or 1 inch = 1 foot, but the resultant maps would have been too cumbersome to handle.

After an area of a site was mapped, all of the major features, excluding most postholes and house trenches, were wholly or partially excavated depending on time constraints. Drawings, photographs, and soil samples were taken of each feature. Auger boring soil samples were taken from house trenches that were not excavated. These have not proved to be very useful as interpretative data sources, however.

Large features, including the possible floor scatter at 38BK75 (Feature F5) and a cellar and brick clamp at 38BK245 (Structure 245A and Structure 245K), were approached diferently. Feature F5 at 38BK75 appeared to be a floor scatter overlying two structures which were almost exactly superimposed. This floor was divided into two foot squares and each square was excavated separately. A second possible floor or cellar scatter at 38BK75, Feature F33, was trenched and profiles were drawn. Complete excavation of Feature F33 was impossible within the time limits available. The cellar at Structure 245A was excavated in four quadrants. Complete north-south and east-west profiles were drawn and all artifacts on the cellar floor were thoroughly mapped and removed. The brick clamp at Structure 245K was excavated by trenching through its center and then by excavation in quadrants.

One operation that should also be mentioned here was the emergency mapping of part of a trench house found during road widening between Sites 38BK75 and 38BK76. Within an hour after being exposed, the trench house and several associated postholes were covered with two feet of heavily compacted red clay. For this reason, the features could only be mapped and not excavated.

Essentially, then, the field mitigation steps moved from surface collections, through block excavations to mechanical stripping and mapping with special provisions for important features.

Laboratory Methods

During the course of fieldwork, artifacts from each day's work were brought to the mobile laboratory in St. Stephen. Once there, they were logged in and checked against field records. Washing and a very preliminary assessment of the artifacts were conducted. The laboratory director, David Babson, was in charge of maintaining records, washing, and several assistants who could occasionally be spared from the field. Approximately one half of the artifacts were washed before being transported to the Marietta laboratory at the end of fieldwork. The remainder of the laboratory work was conducted in Marietta with a laboratory crew that varied from three to five or more and was directed by Mr. Wheaton.

Before the Marietta laboratory phase could begin, the contract was again renegotiated for the analysis phase. On January 11, 1980, this phase finally began, and washing was completed by January 24, 1980. The following cataloguing phase continued until mid-April when the results of the flotation and water screening were added to the catalogue sheets. All beads, faunal, and floral material were sent to outside analysts. Other tasks which were sent to outside analysts included 70 chemical soil tests and x-ray studies of metal. The results of these various analyses (except the x-rays) are included as appendices to this report. Detailed classification and analysis of colonoware, minimum vessel counts, non-local ceramics, buttons, hoes, and other artifacts and features were more or less complete by October 31, 1980 nearly a year following completion of fieldwork.

Essential to the handling of over 30,000 artifacts from the hundreds of proveniences developed by the project was the use of a computer. Extensive statistical analyses of the material was not attempted as this was not part of the contract, and nearly complete mapping and excavation precluded the need for extensive statistical analyses as might be required when only 10 or 25 percent of a site is sampled. The computer was used mainly for data management. In order to make the data accessible by the computer, a code was developed which incorporated the catalog number and the artifact classification. The artifact codes were developed following South's (1977a) artifact groups, with minor modifications. In some cases, artifacts could not be neatly put into one of South's slots and new slots were provided, but the major modification was the inclusion of colonoware in the kitchen group as in Chapter IX.

For persons using this data in the future, a brief description of the catalog code system, is presented here. The catalog code consists of three parts, the site or major location, a hyphen, the horizontal placement, a hyphen, and the vertical placement. A number such as 75B-U31-2 would mean Block B at Site 38BK75; excavated Unit number 31; Level 2. Various letter codes which might fill the separate slots are: In Part 1 of the code, letters A, B, C, D, etc. designate various structures or blocks within a site, and T indicates the material was collected during the testing phase. In Part 2, the letter preceding the number may be absent, indicating a general site collection, L for a controlled surface collection Lot, U or an excavated Unit, F for a Feature, R for a Rakeback during testing, B for collected from a Baulk, and A for individually mapped Artifacts from the cellar at 38BK245. The third part

of the catalog code is a number designating the level for codes L, U, R, and B. (For code F, the last number indicates the part of the feature collected and does not automatically indicate level or quadrant. In order to determine the meaning of a number following a feature number code or F code, the accession notebook must be consulted). The level number codes in Part 3 are 0 for surface, 1 for Level 1 (the root mat at 38BK76), 2 for Level 2 (the dark sand layer at 38BK75 and 38BK76), 3 for Level 3 (the light sand layer at 38BK75 and 38BK76), 4 for Level 4 (the red clay subsoil), and 5 for a mixture of two or more levels as resulted from stripping and sometimes from baulks.

Certain categories of artifacts were noted by their presence and not by count. These were not used in the artifact patterns, but were analyzed separately. Included in this group of artifacts were bone, brick, mortar, daub, seeds and charcoal. Two other categories were counted but were not used in the artifact patterns. These were unidentifiable nonlocal ceramics and unidentifiable metal. Seeds were not used in the patterns since differential preservation due to soil chemistry would affect bone and seeds more severely than other categories of artifacts, and indeed the presence of many seeds may not have been the result of human activity at all. Unidentified metal was not used in the artifact patterns, since putting it in the activities group as done by South would elevate this group out of all proportion as metal preservation was exceptionally poor at the sites. Much of this metal would undoubtedly have gone into the kitchen and architecture groups, if preservation had been better. Bone, brick, mortar, daub and charcoal were not used in the patterns since these were not used by South (1977a) in his pattern analysis.

As classification and analysis progressed, various records were maintained. These included an accession notebook noting each code number, a description of each provenience, the original field bag number, number of bags collected for each provenience, the number of soil samples, and any additional comments. Also for each code, a separate catalog sheet was maintained listing all of the artifacts, their quantity, artifact code, any unusual properties, the date cataloged, and the initials of the cataloger. For consistency, all cataloging on these sheets was conducted by two persons, Lynda Morgan and Linda France, in close consultation with Mr. Wheaton.

Soil samples were floated and water screened in Marietta. A notebook was kept and the following data were recorded: accession number, number of bags, dry weight in grams, texture, Munsell (1975) color under high intensity light, date floated, number of artifacts, presence/absence of faunal remains, presence/absence of floral remains, and comments.

The first step after completely drying all samples was to weigh them and take a curation sample of approximately 250 grams. The curation samples were put into jars and labelled. Munsell soil colors were taken for each dry sample under a constant high intensity lamp. For consistency one person, Maria Almodovar, took all of the readings. A small sample of soil was crushed and dampened to check for texture. Ms. Almodovar, herself a ceramicist, classified soils into sand (S), clay (C), sandy clay (SC), clayey sand (CS), silt (SL), and coarse sand (Cr). While this is often done by soils engineers in lieu of grain size analysis and for quick reference, it is not totally objective, of course. For our purposes, to maintain some kind of consistency and search for possible potting clays, the method worked well.

Once all soils had been so cataloged, they were floated and screened in tap water through 1/16-inch screen. The light fraction was allowed to dry, packed in film vials, and sent for floral analysis. The heavy fraction was sorted for faunal and floral remains and artifacts. Faunal and floral material was sent for analysis, and artifacts were added to the catalog sheets for that provenience.

The bottled curation samples were then tested for pH with a pH meter which had been calibrated against neutral distilled water. As this testing continued, 62 curation samples of selected features and soil layers were sent for chemical soil testing.

Three chemical tests were run on the 62 soil samples besides pH. The consultant for this analysis was Bio-Chem Analysts of Decatur, Georgia. The tests were total organic-carbon, total organic nitrogen, and total organic phosphate (PO_4). Total organic carbon was derived by the wet-digestion method; the total organic nitrogen by the digestion and distillation method; and the total organic phosphate by the ignition and direct digestion method. It was anticipated that these tests would provide data concerning the function of features and be comparable to similar data provided by Drucker and Anthony (1979) at Spiers Landing. This did not prove as useful as had been hoped for two reasons; not enough samples were provided for detailed analysis of particular features and the values obtained at Spiers Landing represent soils which appear to be different in chemical makeup from those studied here. This data is provided in the discussion of features and in an Appendix C for the use of future investigators.

VII. DESCRIPTIONS OF STRUCTURES AND FEATURES

Introduction

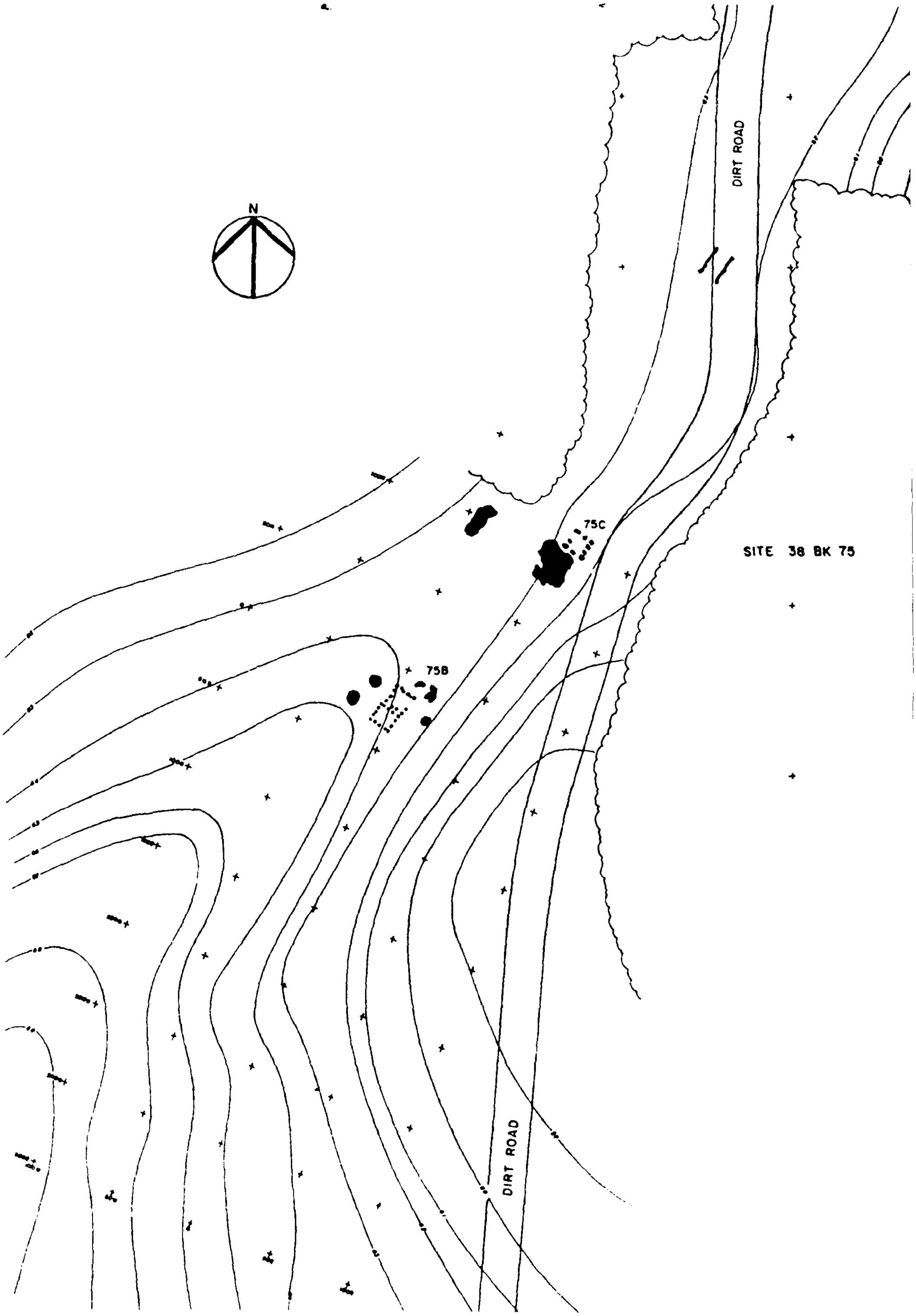
Twenty-nine structures were identified during the data recovery phase. The structures were found and investigated by hand excavation or mechanical stripping. Hand excavation located three complete structures at 38BK75 (Figure 26), three at 38BK76 (Figure 26), and four at 38BK245 (Figure 27). All of the hand-excavated structures at 38BK75 and 38BK76 appeared to be domestic, while at 38BK245 the hand excavated structures consisted of a brick kiln, an office, a naval stores processing structure, and the cellar of an unidentified structure.

Mechanical stripping exposed a larger number of structures, two at 38BK75, ten at 38BK76, and seven at 38BK245. All of the structures found by mechanical stripping at 38BK75 and 38BK76 appeared to be either domestic structures or sheds. The structures found during mechanical stripping at 38BK245 were primarily domestic, with the exception of what appeared to be a barn. The total number of structures per site was, therefore, five at Site 38BK75, thirteen at 38BK76, and eleven at 38BK245.

The following discussion will briefly describe the structures and their associated features, giving limited data by which to compare them. Artifact lists are presented with the discussion of the artifacts in Chapter VIII and soil data are given in Appendix C. Before discussing the structures and associated features, a brief description is given here of the major foundation construction methods, as foundation type is a significant criteria for classifying the structures. Three basic foundation types were found at Curriboo and Yaughan; these were trench, posthole, and brick pier. The first two had different earthen fill and all three illustrated differences in the distance between posts or piers, width, depth, orientation, and general size and shape.

Wall trench construction was the most frequent foundation type found during data recovery. The most obvious feature of this type of foundation was a long, relatively narrow trench excavated into subsoil. Trenches ranged in width from .8 or .9 foot to 1.5 feet, although most were approximately one foot wide. The width within trenches varied, and there was more variability within trenches at Site 38BK76 than at 38BK245. The trenches were nearly vertically sided and flat bottomed in cross section (Figure 28). Depth of the trenches was from 1.5 to 2.5 feet below ground surface and usually extended a foot into subsoil. Length varied from 9.5 to over 40 feet, depending upon the size of the structure.

Two parallel trenches of nearly equal length usually defined the outline of a structure, but in some cases cross trenches were placed midway along the structure and at the ends. At 38BK76, some trenches appeared to represent additions or replacement walls, parallel to the long side.


N
DIRT ROAD
75C
SITE 38 BK 75
75B
DIRT ROAD

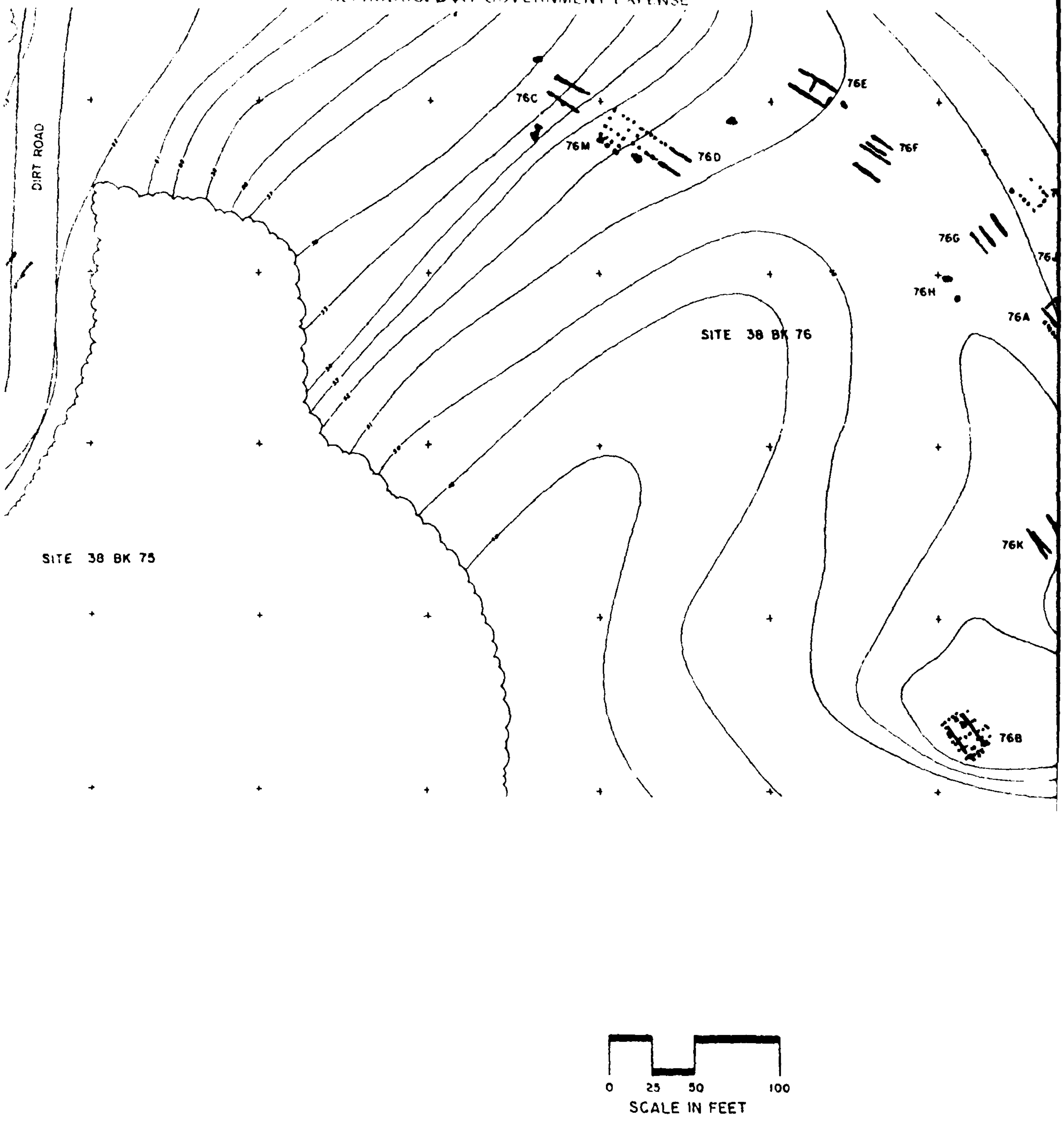


FIGURE 2
Site 38B
Site Pla

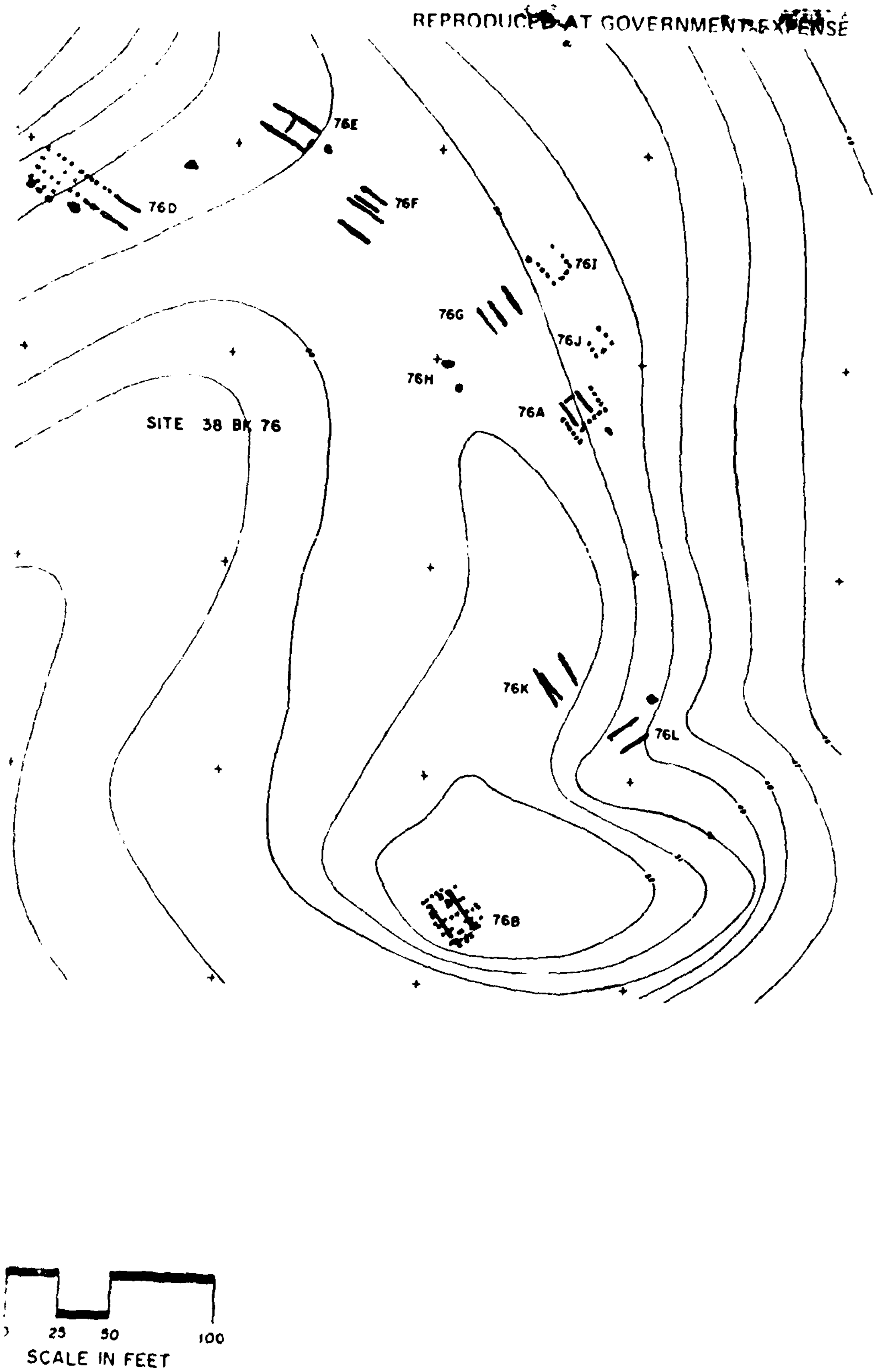
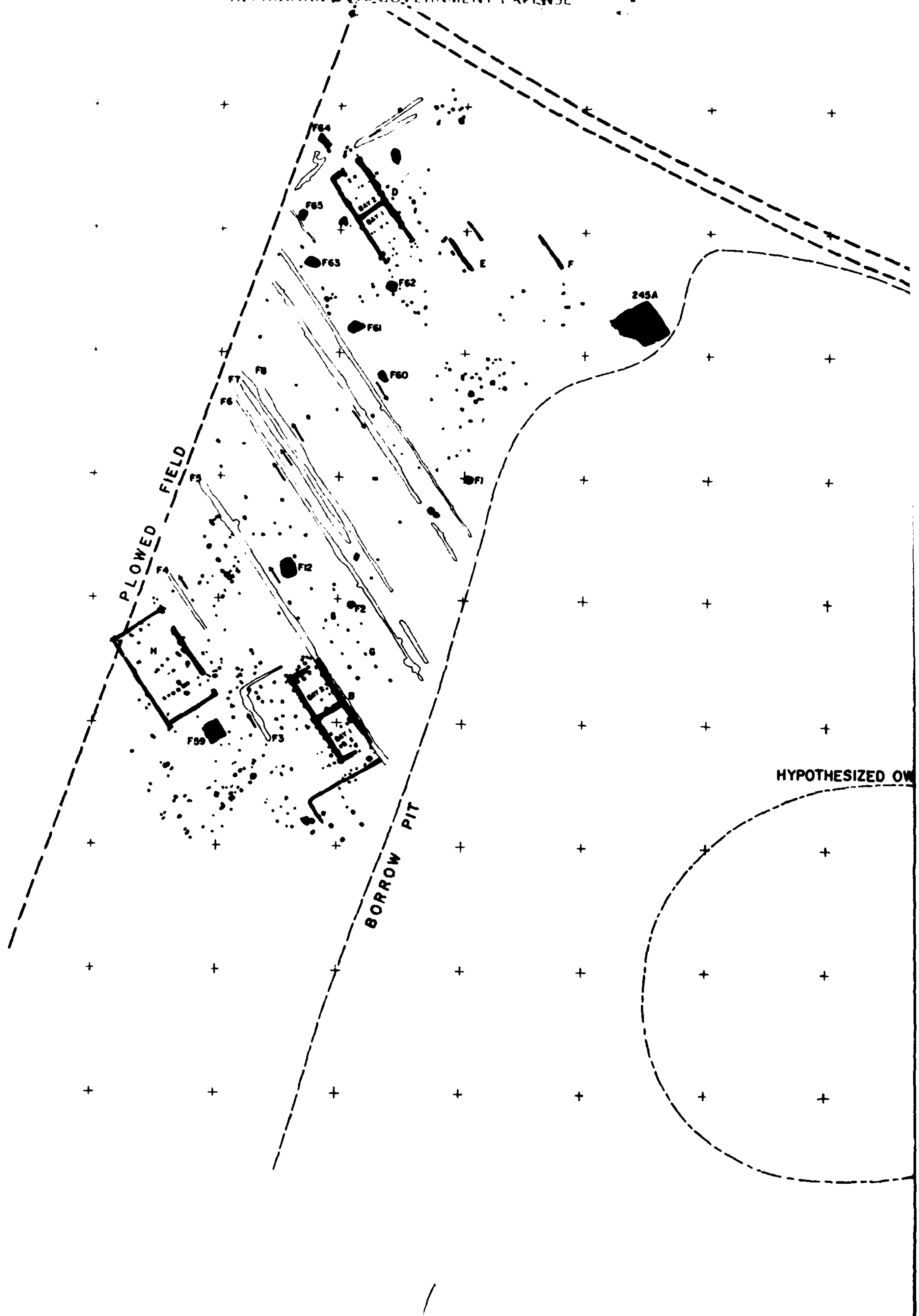


FIGURE 26
Site 38BK75 and Site 38BK76
Site Plan Yaughan Plantation


F64
F65
D
BAY 2
BAY 1
E
F
F63
F62
245A
F61
F60
F8
F7
F6
F1
F5
F12
F4
F2
G
H
BAY 2
B
BAY 1
F59
F3
PLOWED FIELD
BORROW PIT
HYPOTHESIZED OW

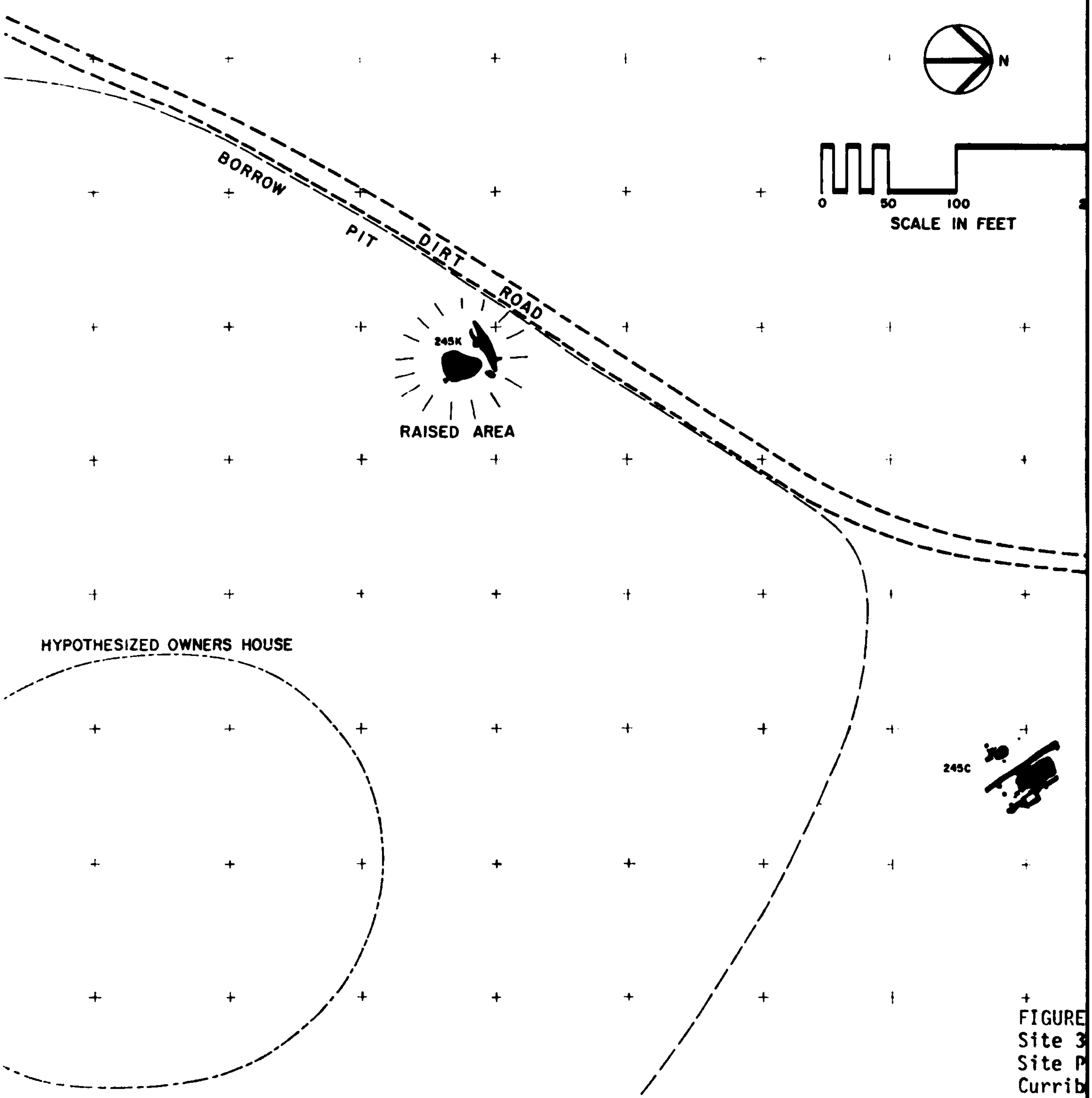


FIGURE
Site 3
Site P
Currib

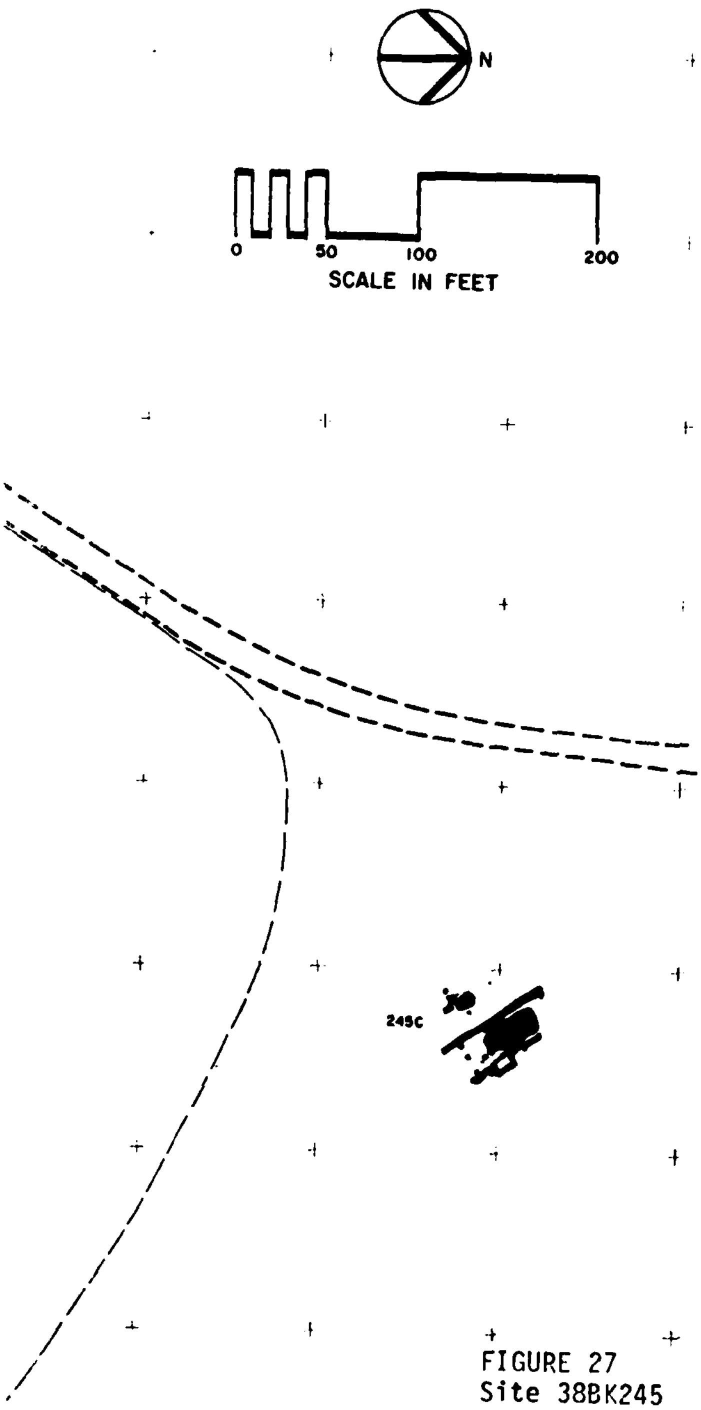


FIGURE 27
Site 38BK245
Site Plan
Curriboo Plantation

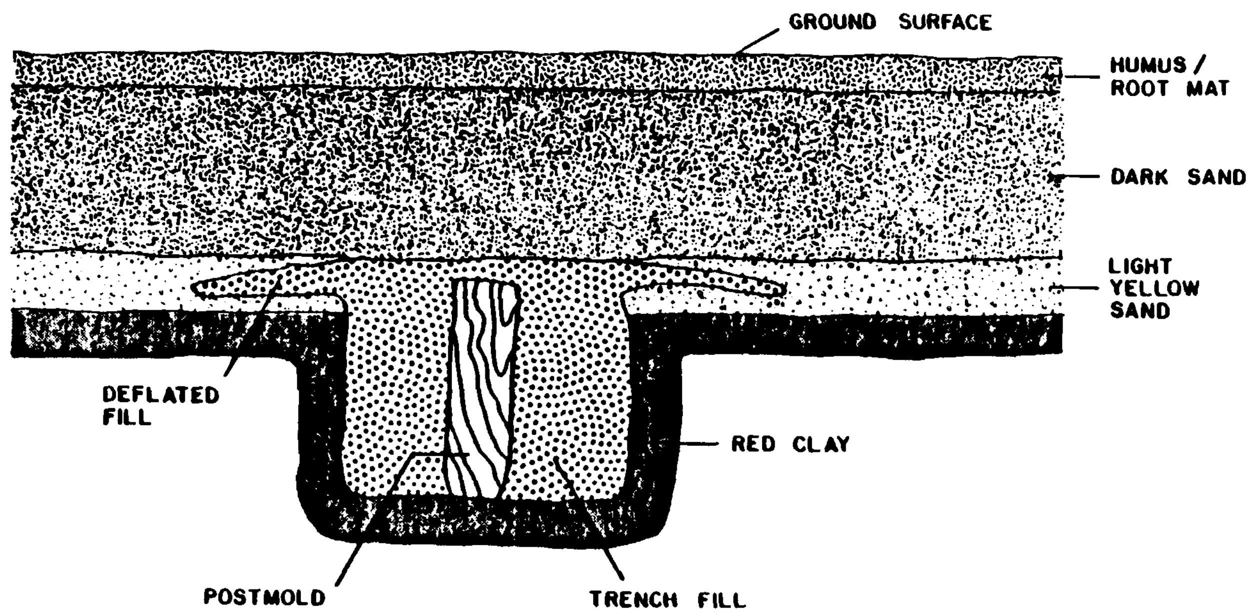


FIGURE 28
Typical Trench
Cross Section

Once a trench was dug by the builders, posts were placed down the centerline and the trench was refilled, often with fill different from the surrounding soil. The quality of this fill and the average distance between posts provided two important clues to the superstructure types. The average distance between posts of all trench structures with identifiable posts was 2.2 feet, as opposed to the 3.7 feet between posts in posthole foundations.

The trench fill at 38BK76 consisted of subsoil and minor amounts of topsoil. This red clay subsoil fill dries hard and may have been used to make some of the colonoware pottery found at 38BK75 and 38BK76. The trench fill at 38BK245 was strikingly different from the red clay subsoil, being finer, more elastic, and often of a gray color. The trench fill at Structure $75B_2$ was sand and barely distinguishable from the surrounding topsoil matrix. At 38BK245, and to a lesser extent at 38BK76, the clay trench fill had a somewhat swirled appearance, apparently due to being mixed with water, much like mortar. This mixing was far from complete, however.

Posthole foundations are more familiar on historic and prehistoric sites. The postholes at Yaughan and Curriboo had varying sizes and shapes for the placement of individual and, occasionally, double posts. The amount of variability of post distance in posthole foundations was higher than in trench construction. This variability, sometimes ranging up to six or even eight feet, possibly indicates a greater variety in the superstructure and possibly in the function of posthole structures. As with trench fill, posthole fill varied. In approximately half of the postholes, the fill was almost exclusively topsoil. It seems apparent that postholes were filled with the same material excavated from them, whereas trenches were intentionally refilled with mixed clay.

A third and minor foundation type occurred in only one structure at Site 38BK245, and may have fulfilled a function as an office rather than a slave cabin or shed. Structure 245C was built on brick piers which rested on or just below the ground surface. The bricks were held together with tabby-like mortar and the piers were from five to eight feet apart. This was also the only structure with an indoor fireplace and brick chimney.

How measurements were taken is critical to understanding the data on structure size and orientation. The distance between posts (i.e., postmolds) was only taken when postmolds were present in trench structures or could be placed within .25 foot by extrapolation in posthole structures. For this reason, some structures could not be used at all for post distance measurements (Structures 76C, 76J, 76L, 245F, $245C_2$, and the house in the dirt road at 38BK75), and other structures had only a few measurable postmold distances (Structure 245B had four, 76G had four, 76F had three, 76E had four, and all the remainder had between five and 19 measurable distances).

Postmolds varied in size and shape, as did the trenches and postholes where they were found. The available data did not indicate any correlation between trench or posthole size and postmold size, but it should be noted that only four structures had hewn or sawed posts, which were rectangular in cross section. These were Structure 245H, an hypothesized barn, where all posts

were rectangular and charred at the bottom, and Structures $245C_2$, 245B, and 245D, where both rectangular and rounded posts were used. The variation in post shape and size for unmodified posts within a single structure indicates that the builders were undoubtedly using material readily available in the surrounding forested areas with little or no preparation prior to use.

Measurement of the structures to obtain length/width ratios and floor space were taken in one of the following ways. When postmolds were distinguishable in a posthole, walls were measured from the center of the postmolds. When postmolds could not be distinguished, measurements were taken from the center of the posthole. The measurements of parallel sides were then averaged to obtain the length and width of the structure. Trench structures were measured in the same way.

Orientation, along with location and size, proved to be an important factor in settlement pattern analysis and varied significantly within and between sites. Orientation was measured by averaging the orientation of the two long sides of each structure, clockwise from north. Postmolds were used to measure orientation, when present. When only a few or no postmolds were present or visible, the orientation was based on a line running through the center of the end postmolds and touching all visible postmolds, or by running down the center of the trenches.

Additions such as porches, storage sheds, or extra living space were noted on some structures. These were recognized by their usually smaller relative size, their location, and their trench or posthole fill, which generally differed in color and texture from that of the original structure. Other structures exhibited repair work. This was recognized by the form of closely spaced or extra postholes on one of the parallel walls; by the slightly skewed alignment of the extra postholes, usually on the outside of the structure; by postholes overlapping the sides of postholes and trenches; or by the smaller size and often shallower depth of the hypothesized replacement postholes. In a few cases at Site 38BK76, trenches appear to have been replaced, or additions added, using trench construction. Since none of these structures were in hand excavated blocks, it is impossible to determine whether these extra trenches at 38BK76 were replacements or additions.

The placement of doors and windows is problematic. The lack of sufficient quantities of window glass at any of the structures, clouded by post depositional disturbances at 38BK75 and 38BK245, make it impossible to locate windows. However, available evidence indicates that some of the structures probably had single pane windows. Door location is also difficult to determine. This problem is addressed as the structures are described below.

The only definite chimney was found at Structure 245C, and the only definite hearth at Structure 75B, but outside the structure. Possible hearths or ash dumps were found at Structure 76A outside the structure and at Structure 76B inside the structure. These latter two features were very amorphous and may have represented other activities such as soap making (Drucker 1979). There were no indications of wattle and daub or stick and mud chimneys at any of the structures either by concentrations of fired or unfired clay daub or by wattle stains.

Descriptions

The descriptions given below are organized from one end of a site to the other rather than in the order of excavation or recording. After the description of each structure, a discussion of the features associated with that structure follow. Features which did not appear to be associated with a particular structure are discussed as they appear across the site. The discussion of each site also includes tables describing the structures and features and the artifact patterns associated with them. Artifacts are discussed in more detail in Chapter VIII. The tables describing the structures and the artifact patterns are self-explanatory, but the tables describing the features require explanation. The function of virtually all the features could, in one sense, be described as trash disposal since trash was disposed in all of them at one time. "Function" on the tables is a best estimate of the primary function of the features. In a few cases, even this is questionable and is so designated by a question mark. "Association" is always difficult to attribute. This is especially true of features from stripped areas. Generally, association means simply proximity. The depths given for the features are the maximum depths into red clay subsoil since these are critical for determining clay extraction pits and because the depth of features in stripped areas could not be measured from the original ground surface. The estimated number of artifacts per cubic foot is the least precise data category on the tables. These numbers could only be computed with any accuracy for regularly shaped features and, in fact, were only computed for regularly shaped features which could have potentially been primarily trash or clay extraction features. Of course, the figures cannot take into consideration artifacts which would not normally be preserved. Therefore, it is possible that some features were filled with food wastes, but upon excavation contained only a few sherds and a low artifact per cubic foot ratio.

Site 38BK75

Site 38BK75 was located in a field which had been planted in corn and soybeans before fieldwork (Figures 26 and 29). There is a gentle rise running northeast-southwest and dropping from the southwest to the northeast in the area of the site. The structures appeared to be aligned with this rise. Structures $75B_1$, and $75B_2$ were located at the southwestern end of the site and were centered on the rise. Structure 75C was located to the northeast, and although it was aligned with the rise, it was located on its southeastern slope. A final structure was located further to the northeast of Structures 75B and 75C in a dirt road. Trash and clay extraction features clustered around the structures and along the top of the rise.

Tabular descriptions of the structures and features at 38BK75 are given in Tables 10 and 11. Since Structures $75B_1$ and $75B_2$ were side by side (Figures 29 and 30), the artifact group data (South 1977a) is actually a mixture of these structures. The only feature which was clearly associated with only one of these structures was Feature F5, a floor midden associated with Structure $75B_2$. The artifact patterns (Table 12) represent excavated material from both structures, including square/level material, postholes, and features.

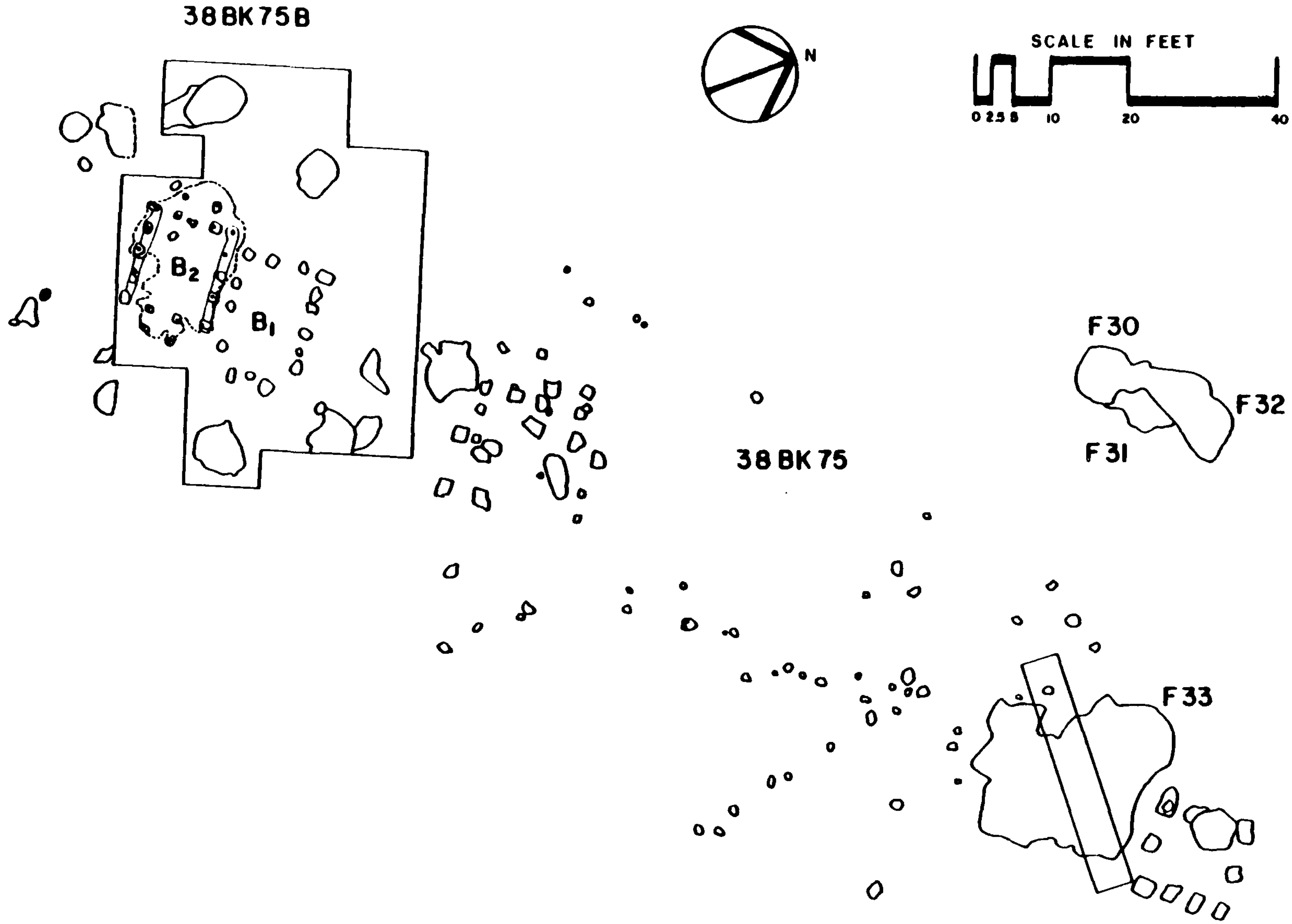


FIGURE 29
Site 38BK75
Site Plan

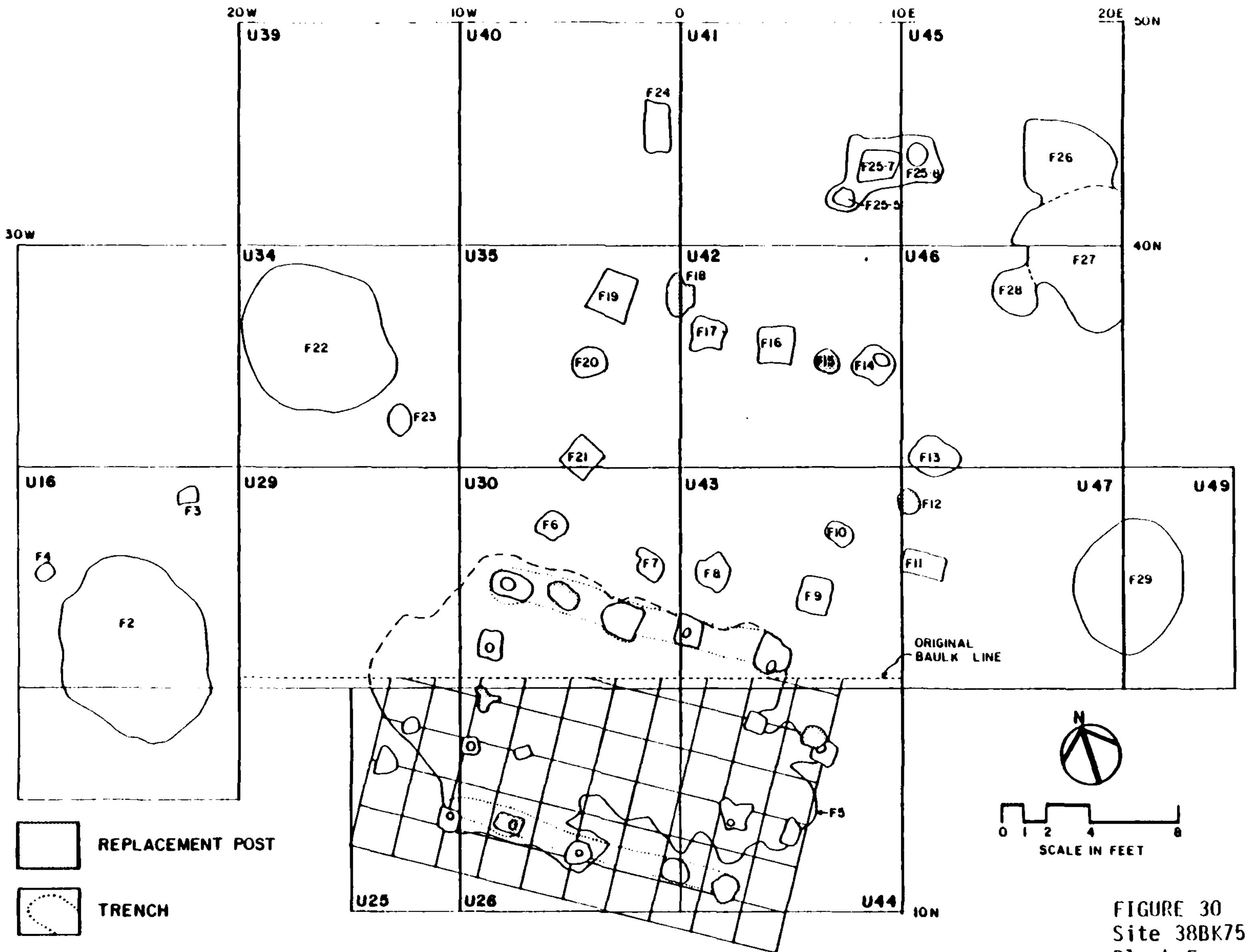


FIGURE 30
Site 38BK75
Block Excavation

TABLE 10. 38BK75 Structures

	$75B_1$	$75B_2$	75C	in dirt road
Construction Type (1)	P	P	P	T
Function	cabin	cabin	shed	cabin?
Mean Ceramic Date (2)	1789.8	1789.8	unknown	unknown
Length	12.5'	12.8'	10'	±18'
Width	11.0'	10.3'	10'	unknown
Floor Space	153.0 sq. ft.	130.7 sq. ft.	100 sq. ft.	unknown
Structural Fill (3)	ST	ST	M	M
Recovery Method	Excav.	Excav.	Strip	Strip
Orientation	128°	128°	128°	33°
Posthole Distance				
Average	3.23'	3.17'	4.50'	unknown
Maximum	5.10'	4.30'	5.80'	unknown
Minimum	1.90'	2.20'	3.40'	unknown

(1) P = posthole, T = trench
(2) See text for basis of mean ceramic date
(3) ST = sandy topsoil, M = mixed red clay and topsoil
(4) Excav. = hand excavation, Strip = mechanical stripping

The mean ceramic date is based upon artifacts from the excavated units, the floor scatter (F5), other features, and excavated postholes from Structure 75B. This date does not include material from outside the block, from the clay extraction/trash features to the north of the block, or from surface collections.

The stratigraphy of the excavated block (Figure 31) at 38BK75 generally held true across the stripped areas of the site. Generally, the soil consisted of dark organic sand, overlying light yellow sand, overlying red clay subsoil. Features began to be defined near the top of the light yellow sand and were clearly defined by the bottom of this layer. Plow scars occasionally showed up within the light yellow sand.

TABLE 11. 38BK75 Features

Feature	Function	Association	Shape	Depth Into Red Clay	Estimated Artifacts per Cubic Foot	Fill
F2	Clay extraction/Trash	Structures $75B_1$ & 2	oval	1.1'	7.6	mixed topsoil and red clay subsoil
F5	Floor scatter	Structures $75B_1$ & 2	irregular			mixed red clay and topsoil
F22	Trash/clay extraction?	Structures $75B_1$ & 2	round	.5'	11.0	dark sandy topsoil
F25	Hearth	Structures $75B_1$ & 2	rectangular			topsoil, charcoal and disturbed clay subsoil
F26-27	Clay extraction/trash	Structures $75B_1$ & 2	irregular	1.6'	10.9	mixed topsoil and red clay subsoil
F29	Clay extraction/trash	Structures $75B_1$ & 2	oval	2.0'	24.7	mixed topsoil and red clay subsoil
F30	Clay extraction	Features F31 & F32	round	1.1'	1.6	topsoil
F31	Clay extraction	Features F30 & F32	oval	1.1'	3.2	topsoil
F32	Clay extraction	Features F30 & F31	oval	1.6'	0.6	topsoil
F33	Floor scatter?	Structure 75C	squarish			dark brown topsoil

TABLE 12. Artifact Patterns by Structure and Feature at 38BK75

	Provenience											
	75B		75BF2		75BF5		75BF22		75BF25		75BF26 & F27	
Artifact Group	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	3393	68.04	118	57.84	146	60.33	47	54.65	100	90.91	263	75.14
Architecture	1403	28.13	73	35.78	86	35.54	38	44.19	7	6.36	77	22.00
Furniture	3	.06	0	-	0	-	0	-	0	-	0	-
Arms	8	.16	0	-	0	-	0	-	0	-	1	.29
Clothing	29	.58	2	.98	4	1.65	0	-	0	-	2	.57
Personal	4	.08	0	-	0	-	0	-	0	-	0	-
Tobacco Pipes	123	2.47	7	3.43	5	2.07	0	-	3	2.73	6	1.71
Activities	24	.48	4	1.96	1	.41	1	1.16	0	-	1	.29
Total	4987	100.00	204	99.99	242	100.00	86	100.00	110	100.00	350	100.00

TABLE 12 (continued)

	Provenience									
	75BF29		75F30		75F31		75F32		75F33	
Artifact Group	#	%	#	%	#	%	#	%	#	%
Kitchen	651	69.77	28	57.14	188	73.44	26	72.22	23	58.97
Architecture	238	25.51	15	30.61	51	19.92	10	27.78	11	28.21
Furniture	0	-	0	-	0	-	0	-	0	-
Arms	6	.64	0	-	1	.39	0	-	1	2.56
Clothing	5	.54	0	-	1	.39	0	-	0	-
Personal	2	.21	0	-	0	-	0	-	0	-
Tobacco Pipes	23	2.47	5	10.20	15	5.86	0	-	3	7.69
Activities	8	.86	1	2.04	0	-	0	-	1	2.56
Total	933	100.00	49	99.99	256	100.00	36	100.00	39	99.99

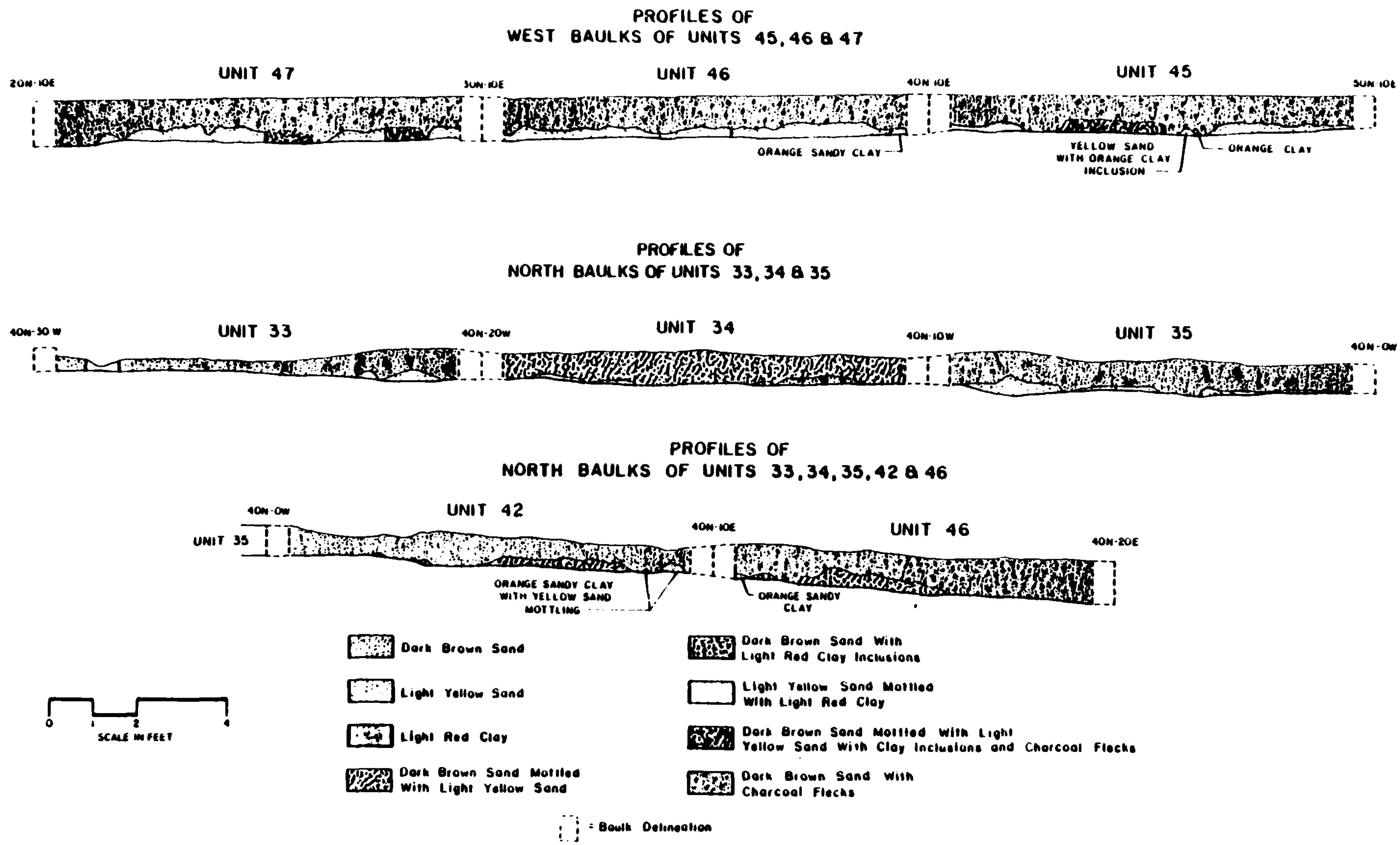
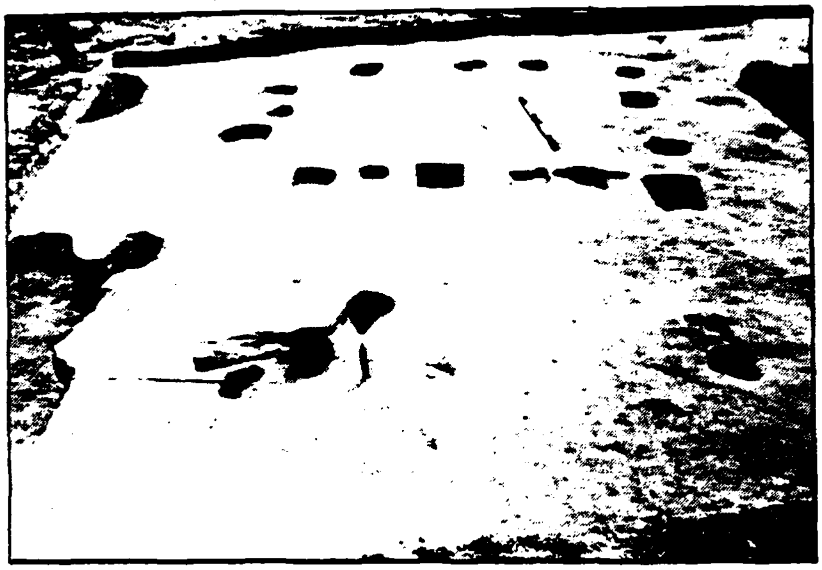


FIGURE 31
Site 38BK75
Excavation Block
Profiles

STRUCTURE $75B_1$
LOOKING SOUTHWEST



STRUCTURE $75B_2$
LOOKING WEST

STRUCTURE 76A
LOOKING WEST

FIGURE 32
Photos of Site 38BK75,
Structures $75B_1$ and $75B_2$,
Site 38BK76, and Structure 76A

Figures 30 and 31 illustrate the floor plans of the structures in the excavated block at 38BK75. Structure $75B_2$ was parallel to and slightly offset from Structure $75B_1$, the structure immediately to the northeast. The shape and size of the two structures were nearly identical, indicating that they were built following the same plan and at approximately the same time. As can be seen, Structure $75B_1$ has two replacement postholes on its northeastern side and one replacement posthole on the porch or stoop addition on the southeastern end of the structure. Structure $75B_2$ had one replacement posthole on the porch or stoop and an extra post has been added on the northwestern ends of the northeast and southwest walls, similar in placement to those on the northeastern side of Structure $75B_1$. The determination of replacement postholes, in this case, took into consideration the overlapping of postholes, such as the one on the porch of Structure $75B_2$, the smaller size of the designated replacements and their irregularity of placement.

The replacement postholes at Structure $75B_1$ were excavated, as were the other postholes. The average depth below surface of the original posts was 1.73 feet, whereas the replacement posts averaged 1.52 feet. When the stoop replacement post was eliminated, the average for replacement posts was 1.39, or .34 foot shallower than the original posts, although the range of depths of the original posts ran from 2.47 to .98 and, therefore, included the mean and range of replacement posts.

Posthole Features F3 and F4 on Figure 30 were .97 and .70 feet below surface, respectively. These were not excavated postholes, but true postmolds. Feature F3 also showed evidence of having been sawed or hewn on one side. These posts' alignment, depth, and form indicate that they were not associated with the structures and were probably recent fence posts.

A floor scatter (Feature F5) covered Structure $75B_2$. The floor scatter varied in thickness from less than 1 to 3.5 inches in depth and covered the area noted in Figure 30. Its surface had been severely disturbed by plowing. It covered most of the postholes and trenches of Structure $75B_2$ and first appeared in Units 29, 30, and 43. Since at that time it was thought to be another trash feature around Structure $75B_1$, and because no time had been scheduled for continued excavation at Site 38BK75, the portion of Feature F5 in Units 29, 30, and 43 was sectioned and excavated, revealing a line of postholes. After further negotiations with IAS and the discovery that the feature was probably a floor, it was exposed, gridded into two foot squares, and excavted by the grid. Upon completion of the excavation the remaining postholes of Structure $75B_2$ appeared, and the faint outlines of sand-filled trenches of a third structure were noted, into which the postholes intruded. No postmolds were noted in the underlying trench structure, leading to the assumption that the posts in the postholes directly replaced posts that had been in the trenches. If that was the case, then the superstructures of the trench and later posthole structures were probably very similar, if not the same.

Analysis of the floor scatter, Feature F5 (Figures 33 and 34), sheds light on the interior layout of the structure and upon the placement of the trefoil-shaped replacement posthole in the center of the northwestern wall. Table 12 shows the occurrence of the Architecture Group artifacts (which together represent 93.55 of all artifacts from the floor). These artifacts clustered along the northwestern wall and along the central axis of the structure. Unfortunately, such a spatial distribution could not be conclusively proven since the northern portion of the structure was not excavated in two foot squares. However, if the artifacts found in the northern portion were averaged into 15 hypothetical two foot squares to cover the northern portion, each square would average 3.5 artifacts. This would not be enough to significantly change the clustering noted above, and indeed, most of the artifacts in the northern portion of the feature would probably cluster along the back wall (northwest wall), leaving few if any artifacts for the remaining squares. In any case, in the two-thirds to three-fourths of the floor excavated by two foot squares, there was definite clustering along the back wall and down the center of the structure.

Primary de facto refuse as defined by South (1977:297) tended to cluster in unused areas or in areas of poor visibility such as corners, soft earthen floors, and beneath cupboards. The small size of the artifacts recovered from the floor scatter showed that the artifacts would have been easily overlooked, could have fallen into cracks or narrow inaccessible areas, and could have been easily pushed into the earthen floor (Fehon and Scholtz 1978). The fact that these artifacts in Feature F5 were concentrated along the back wall and down the center of the structure supports an argument for a wall down the center of the structure.

If a line is drawn, bisecting the central artifact cluster and stopping at its southeastern end, two things can be noted (Figure 35). First, the structure is bisected into two nearly equal parts and second, the line terminates at the trefoil posthole in the back wall. Both of these facts are significant. It is felt that the central cluster of artifacts illustrates the presence of a temporary wall or screen as defined by the bisecting line. This wall or screen would have been approximately ten feet long and would not have reached the front of the structure. This would have allowed passage from one room to the other without going outside. The peculiar shape of the terminating posthole indicates that it was dug after the structure was built and owed its shape to being dug while the existing back wall was in place. The lack of a posthole in the center of the back wall at $75B_1$ may indicate that this structure had no central dividing wall. However, the lack of a comparative floor scatter at $75B_1$ makes it impossible to state this with any certainty. The main argument against such a central wall is that there was no posthole for its southeastern end. This can be explained if the wall was temporary and was suspended from above. If such a central wall or screen did exist in Structure $75B_2$, it would imply two sleeping areas, one for parents and the other for children, or for two couples or sets of adults. The number of persons inhabiting the structure would, therefore, have probably ranged from two adults (one in each room) to two or more adults and several children.

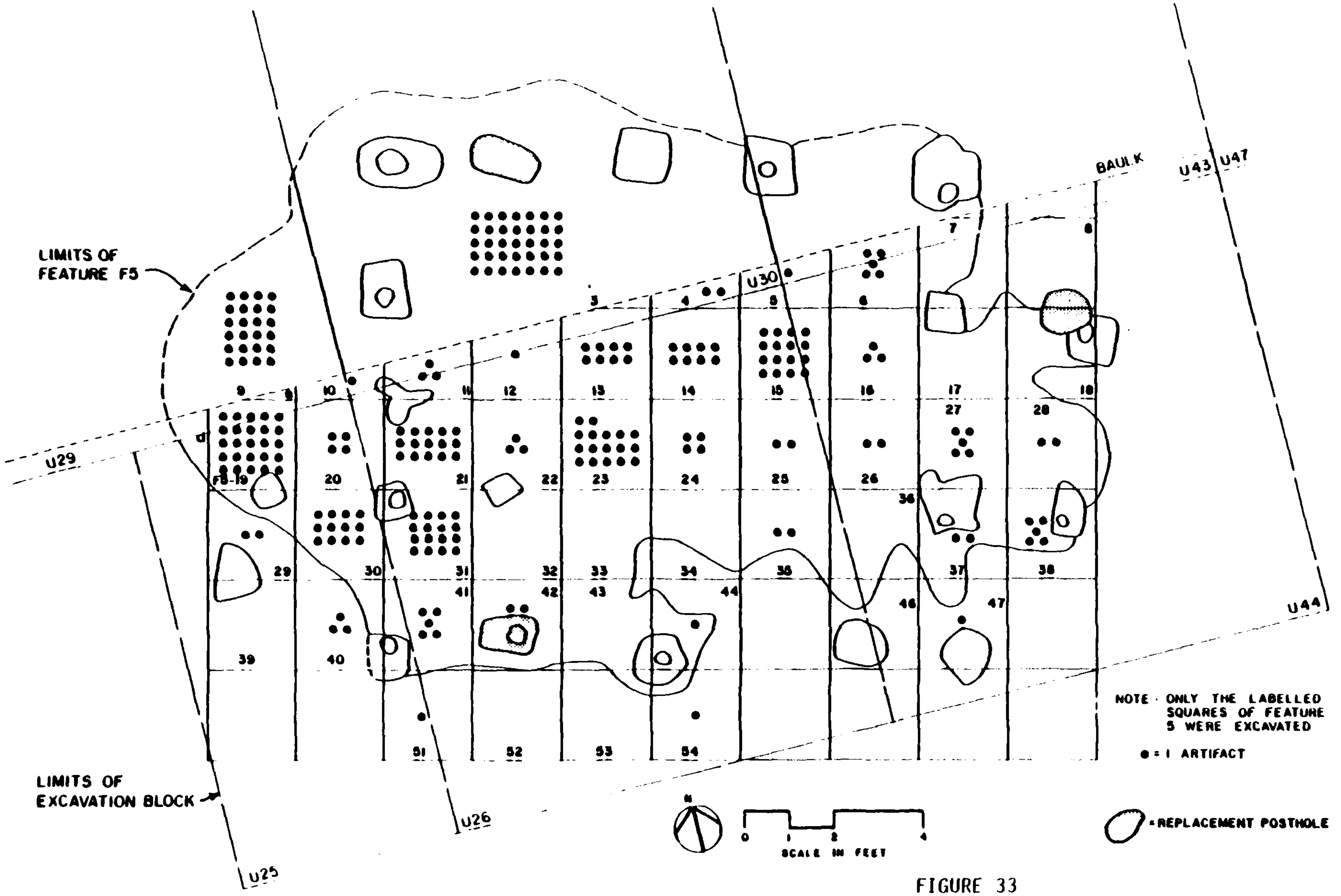


FIGURE 33
Site 38BK75 Feature F5
Distribution of All Artifacts

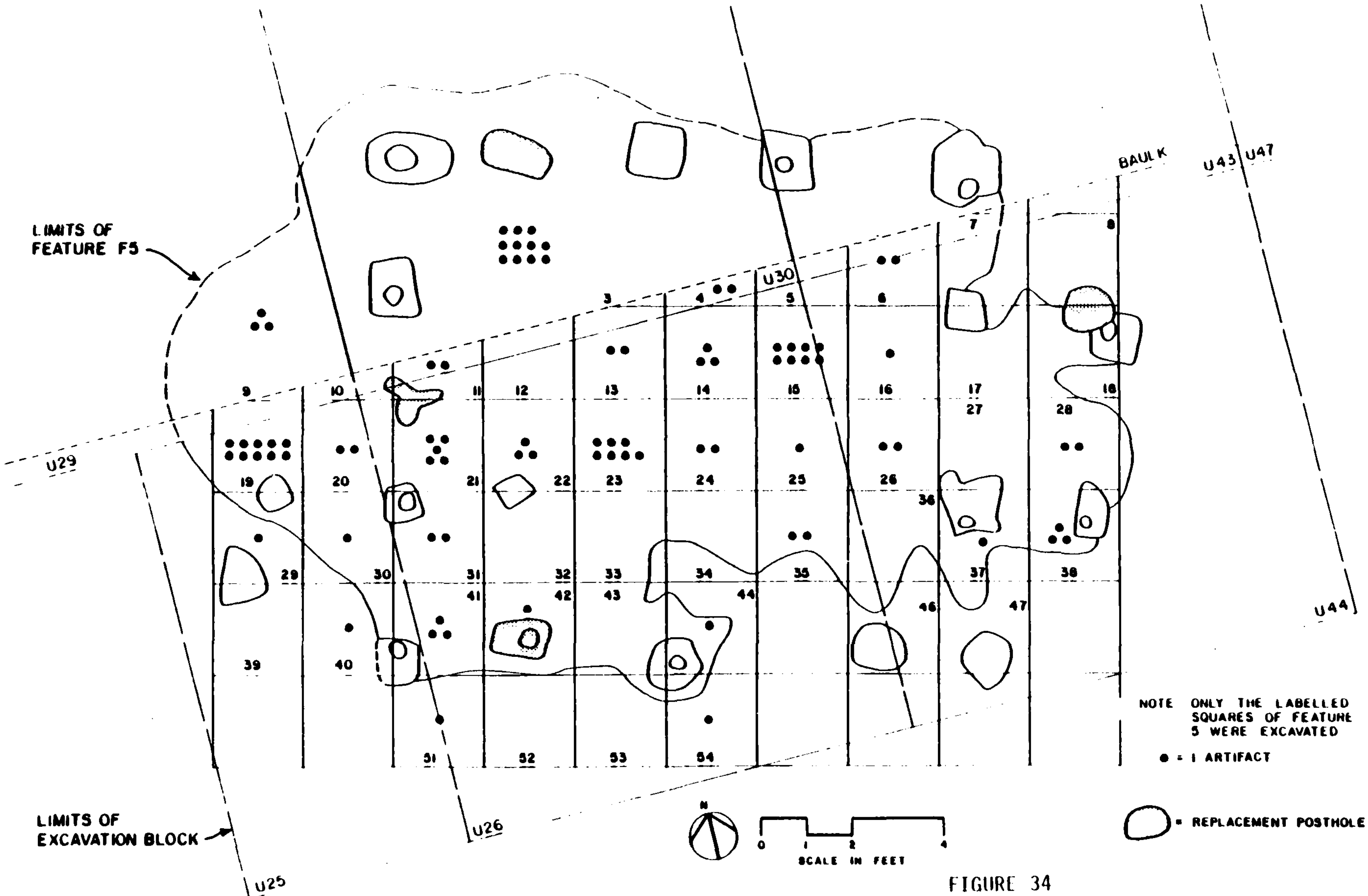


FIGURE 34
Site 38BK75 Feature F5
Distribution of All
Architecture Group Artifacts

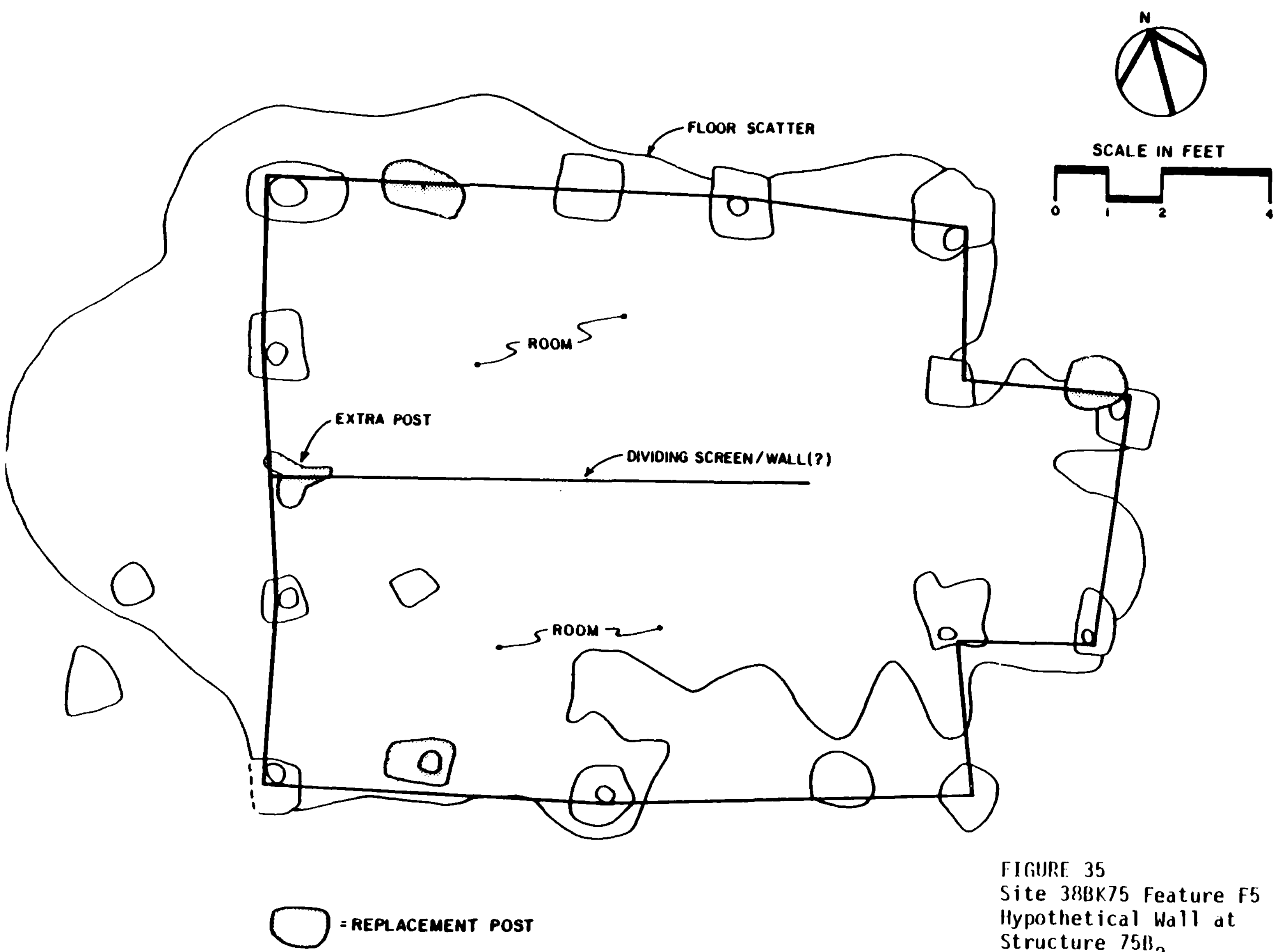


FIGURE 35
Site 38BK75 Feature F5
Hypothetical Wall at
Structure $75B_2$

Feature F25, just to the north of Structure $75B_1$, was the only definite hearth found during the entire excavation, other than the brick chimney base at 38BK245. Figure 36 shows that the northeastern post was replaced and moved farther from the fire pit. Because both the floor scatter (Feature F5) and the hearth were totally excavated, artifact pattern comparisons can be made between two clearly defined features of different function. For all classes of artifacts other than the Kitchen and Architecture Groups, the two features were very similar. However, the hearth showed a very high percentage of Kitchen Group artifacts and a much lower percentage of Architecture Group artifacts than the floor (Table 12). This is to be expected if the functions of the two features have been correctly identified.

The depths and locations of the two features are also indicators of their respective functions. The floor rested on the postholes and trenches at Structure $75B_2$ and had a depth of approximately .82 foot below surface. The hearth was outside of Structure $75B_1$ and had a depth of 2.69 feet below surface for the fire pit, 2.65 feet for the western post, and 1.65 feet for the eastern replacement post. Thus, the floor rested below the topsoil and on the red clay layer, whereas the hearth was excavated into the clay layer.

Feature F2 was located to the west of the structures (Figure 37) and extended 1.1 feet into red clay subsoil. The main portion of the feature was relatively steep sided with a scatter feathering out on the edges; this was no doubt caused by plowing. There appear to have been two episodes of fill (Figure 37). At the interface between the two filling episodes, hoes were found lying on the surface of the bottom layer. Approximately 90 percent of the artifacts came from the uppermost layer and 10 percent from the bottom layer. This suggests that the feature was filled with naturally occurring soils to begin with and only later intentionally filled with trash. Because of its depth into subsoil and depositional history, it is hypothesized that the pit was originally dug for clay extraction and later filled in as a trash pit.

The chemical tests of the fill soil show no significant difference from the natural soil matrix (Appendix C). If the feature had been meant for disposal of animal wastes (no bone was found), the level of phosphate should have been higher than the surrounding soils. It should also be noted that the pH level was within a range that should have allowed for some preservation. At 38BK245, the pH was generally very acid (below 3.5), and yet many bones were preserved, albeit in poor condition.

Feature F22 (Figure 38) may also have been a clay extraction feature although it only extended 50 foot into the red clay subsoil. The low number of artifacts again indicated that the feature's function as a trash pit was secondary. Soil chemistry, as at F2, was similar to the surrounding soil matrix (Appendix C).

Features F26 and F27 (Figure 39) were not recognized as separate features until the top layers had already been mixed. The feature was first sectioned east to west at the approximate center, and the south half was excavated and then profiled. Upon excavation of the north half, Feature F26 bottomed out and showed that it had been intrusive into F27. At that point, it was too late to prevent mixing of the northern part of F27 with all of the F26 material. For this reason, the features are described together here.

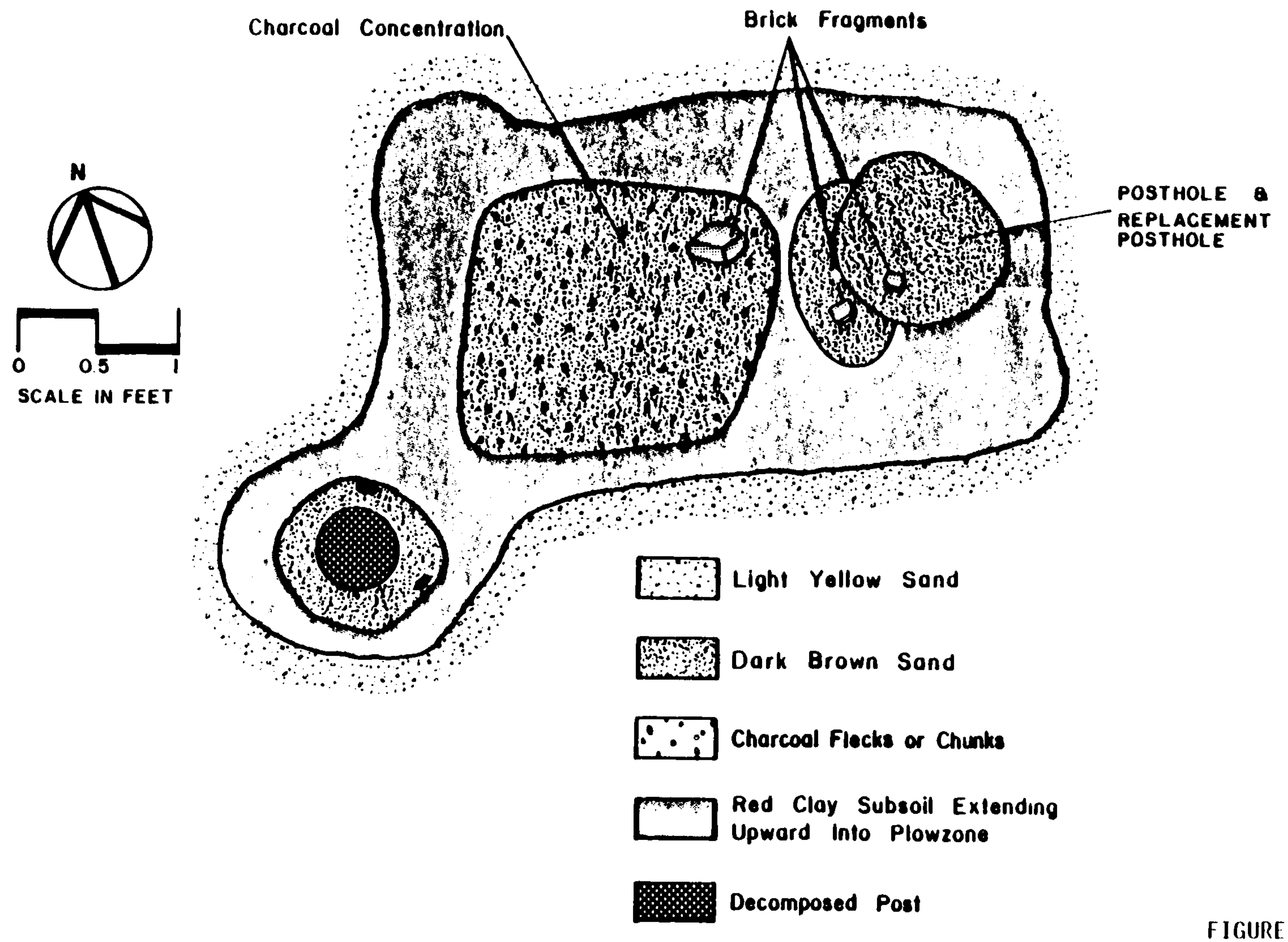


FIGURE 36
Site 38BK75
Feature F25

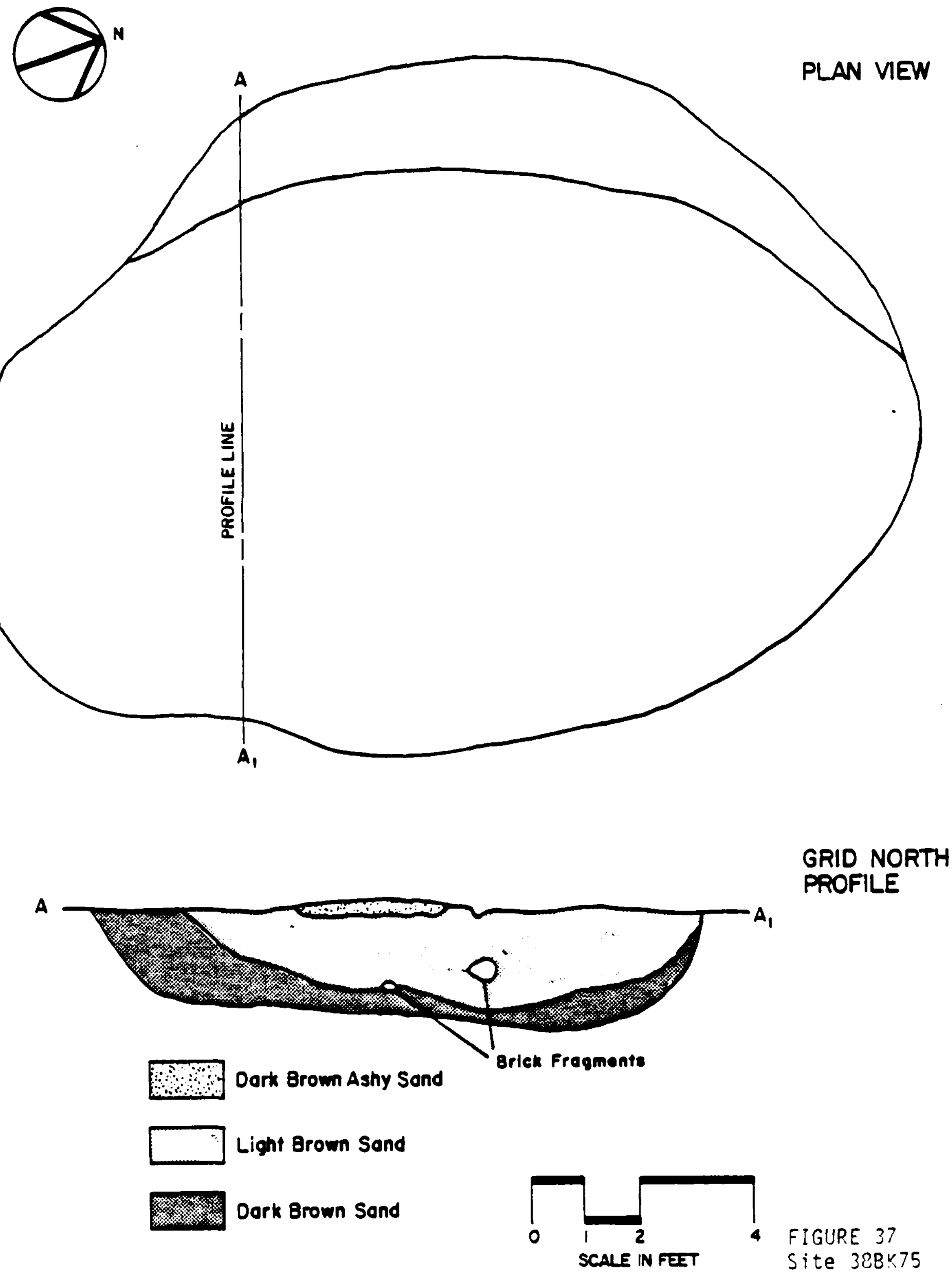


FIGURE 37
Site 38BK75
Feature F2

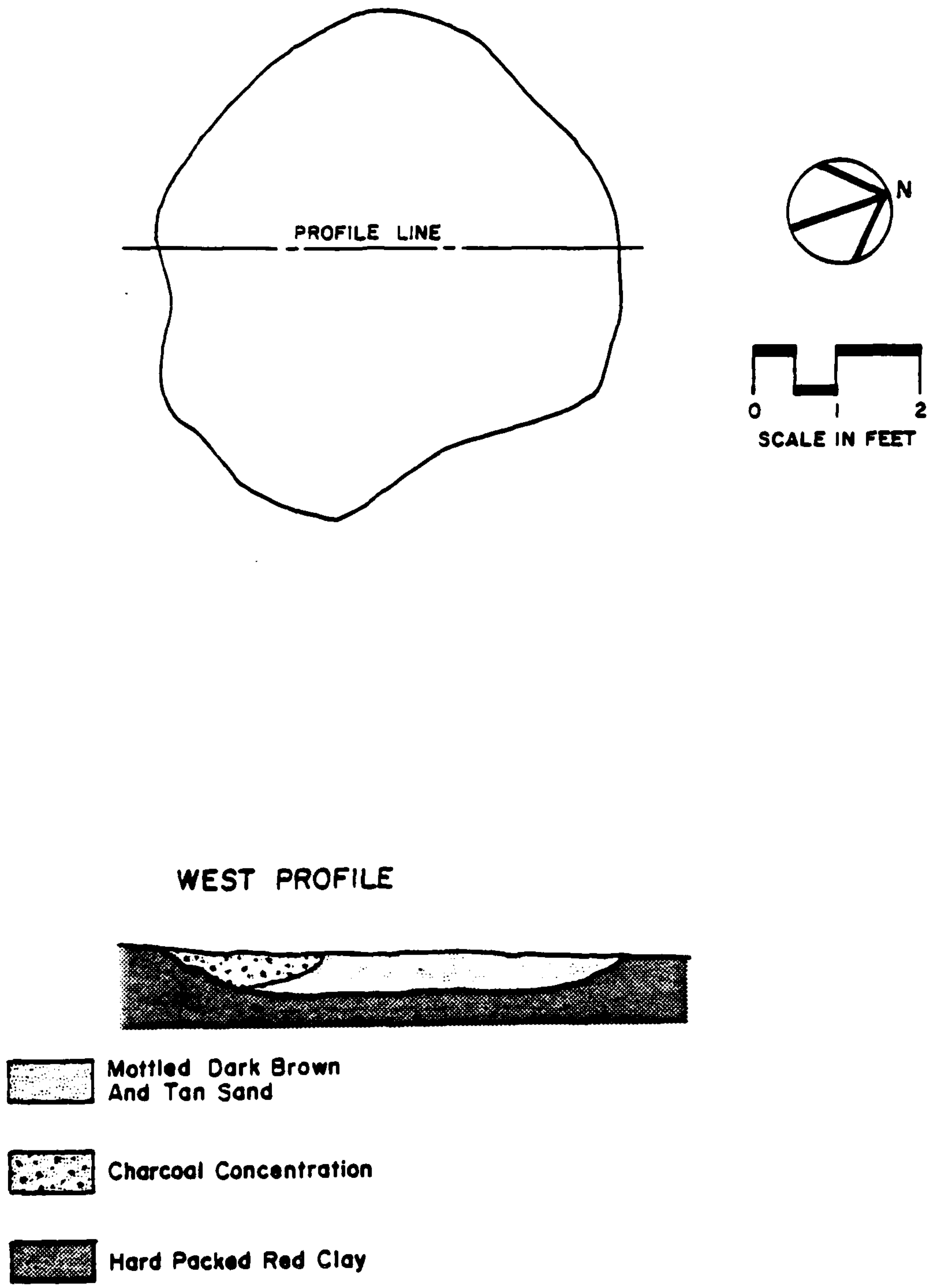


FIGURE 38
Site 38BK75
Feature F22

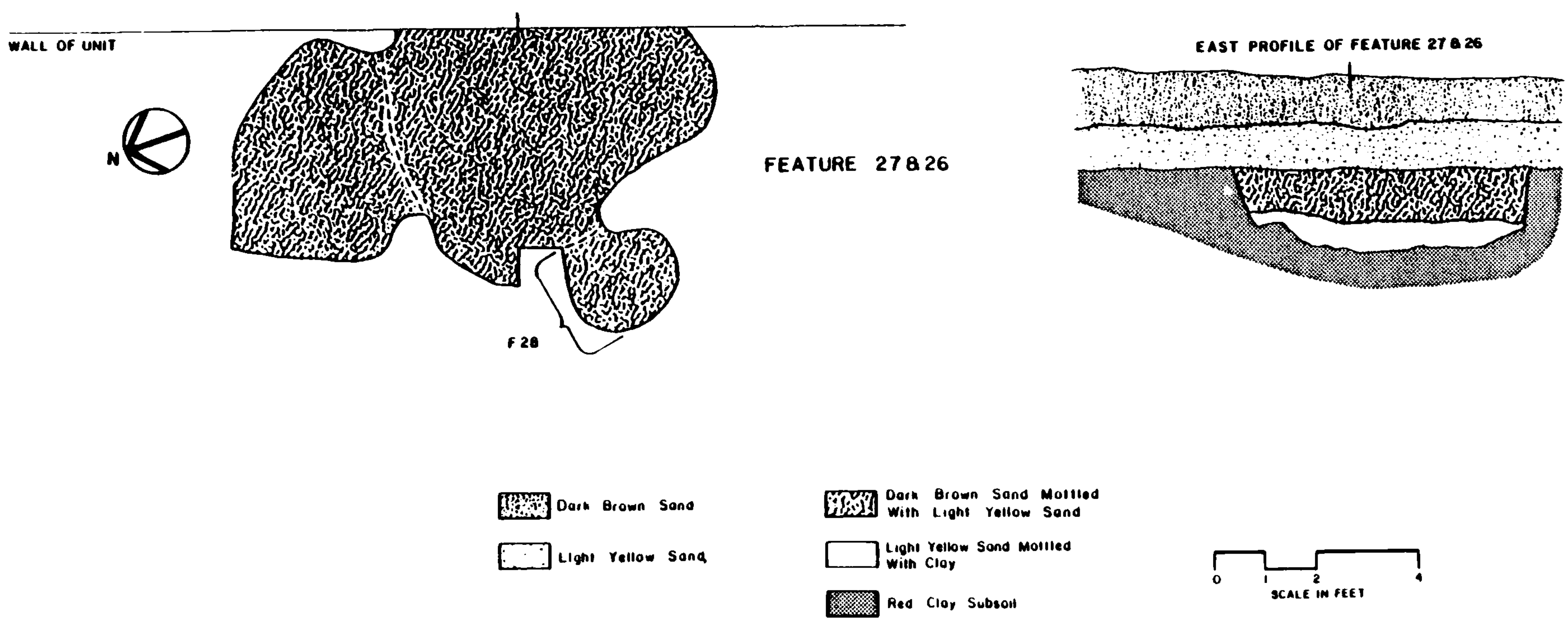


FIGURE 39
Site 38BK75
Features F26, F27, and F28

Feature F26-27 extended 1.6 feet into subsoil leading to its hypothesized designation as a clay extraction pit ultimately filled with trash. The nearly vertical sides of the pit which continued even into subsoil also indicated that an attempt had been made to extract as much clay as possible given the surface opening. Soil chemistry also supported the hypothesis. The soil chemistry of F26-27 fit the pattern of the surrounding soil and gave no indication that the feature had contained extra amounts of organics.

Feature F8 was something of an enigma. On the one hand, it appeared to be closely associated with Feature F26-27, and on the other it was filled with recently rotted wood fragments and contained no artifacts. The feature extended over two feet into the red clay, which was a greater depth than was necessary for a fence post. In sum, it was concluded that F8 was not associated with the slave occupation of the site and represented an exceptionally deep recent fence post.

Feature F29 (Figure 40) was excavated 2.0 feet into subsoil, and had a high artifact total and higher artifact per cubic foot value (24.7) than the previous features. Compared to all other features at 38BK75, this feature also had more bone. Feature F29 contained 23.28 grams of poorly preserved bone, the only such feature in association with Structures $75B_1$ and $75B_2$. All but 6.5 grams of this bone was found in Level 1, which extended into a lower depression in the east side of the pit. This correlated well with the phosphate and pH readings for Level 1, which were significantly higher in phosphate and more neutral in pH than the normal soil matrix (Appendix C).

Despite the higher artifact per cubic foot ratio and the presence of moderate amounts of bone, it was concluded that F29 was dug primarily for clay extraction and was used only secondarily as a trash disposal pit. This hypothesis was supported by a layer of water laid sand lining the bottom of the feature (Level 2B), and by the number of artifacts in Level 2 compared with Level 1. Level 2, which included the water laid sand, contained 14 percent of the feature's artifacts, whereas Level 1 contained 56 percent. Apparently the feature was dug, allowed to remain open, and then slowly filled until Level 1 began to be deposited, at which time the rate of trash disposal increased dramatically. This sequence of events is better explained if Feature F29 is considered as originally being dug for use as a clay extraction pit, rather than purely a trash pit.

The area to the north and northeast of the excavated block was mechanically stripped. Structure 75C was located in this area and was associated with Feature 75BF33, which may have represented the remains of another structure. Structure 75C was one of the few square or nearly square structures found at any of the sites. Its small size, posthole construction, and shape may indicate it had a function different from the majority of other structures. This function is hypothesized to be a shed rather than a domestic structure. Unfortunately, time did not allow hand excavation of the structure or excavation of its postholes. Artifacts from the large feature to the south, F33, may reflect activities at Structure 75C, but this is only conjecture.

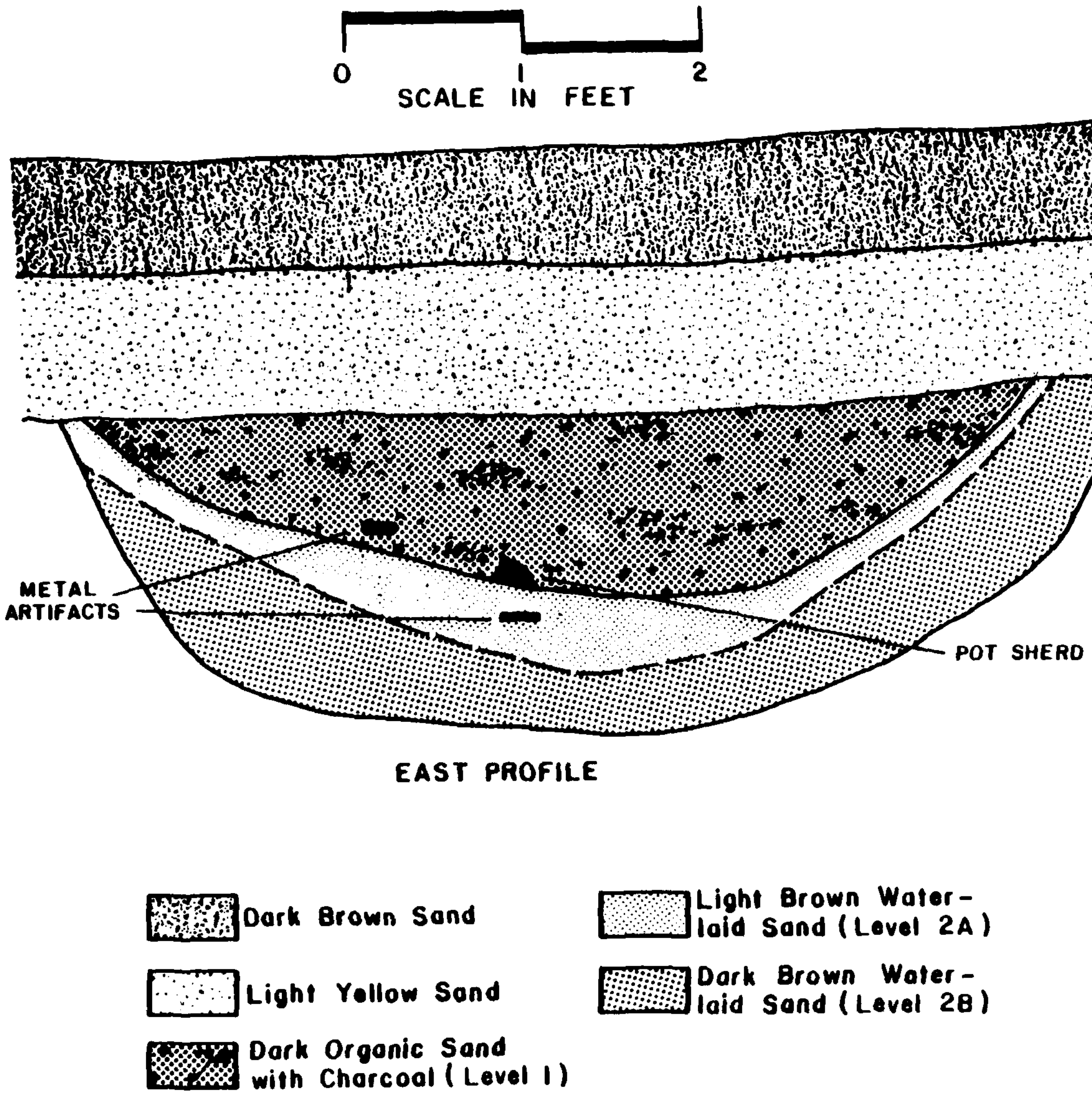


FIGURE 40
Site 38BK75
Feature F29

Feature F33 was a layer of dark organic soil resting on the red clay subsoil. As seen from the trench excavated through it (Figure 41), the feature feathered out on its edges. After analysis in the laboratory and examination of comparative data from Feature F5 (the floor scatter covering Structure $75B_2$), it became apparent that F33 represented a floor scatter. The low number of artifacts (Table 12), their generally small and eroded nature, and the extent and shallow depth of much of F33 all pointed in this direction.

Examination of Figure 41 shows that there was also a low depression in the subsoil near the eastern end of the trench. This may have represented a clay extraction/trash feature, which was subsequently covered by the floor scatter. The greatest depth of the depression into red clay subsoil was 2.0 feet, as deep as any of the clay extraction/trash features near Structures $75B_1$ and $75B_2$. In this depression were two decomposed posts, only one of which was excavated. Analysis has shown the wood to be of the pine family, but species identification was impossible due to the condition of the material. The distance between the two posts was 7.75 to 8 feet, much greater than the post distances at Structure 75C to the northeast. The only similar distance between posts at Feature F33 and at Structure 75C was achieved by measuring posts on adjacent walls. Indeed, the two posts in Feature F33 may have represented posts on adjacent walls of a second structure.

Features F30, F31, and F32 made up a complex of three clay extraction pits, which were located 50 feet to the north of Structure 75C and over 100 feet to the northeast of Structures $75B_1$ and $75B_2$. These features were found during mechanical stripping of the northern portion of Site 38BK75 within the project right-of-way. The soil was stripped to within .1 or .2 foot above red clay subsoil by a bottom loading pan and then shovel shaved to define the features. The western half of each feature was excavated, a profile drawn, and finally the eastern halves were excavated.

Features F30 and F31 extended 1.1 feet into subsoil, and F32 extended 1.6 feet into the red clay (Figure 42). The overburden ranged from approximately .6 to 1.0 foot deep in this area so that the features were originally dug approximately 1.7 to 2.6 feet below surface. The overlapping of the features was obviously greater above the red clay layer than below it. This would not tend to happen if the features had been intentionally dug for trash pits, since digging up garbage to bury garbage would be highly unusual behavior. The fact that the features only overlapped to any great extent above the clay layer indicates that the objective of the pits was the clay layer itself.

The artifacts retrieved from Features F31 and F32 showed similar Kitchen Group percentages and those from F30 and F32 had similar Architecture Group percentages (Table 11). Given that only 342 artifacts were retrieved from the features, any differences in pattern can be accounted for by small sample size. Rough calculations of volume were developed to determine artifacts/cubic foot values. Feature F30 had 1.6/cubic foot, F31 had 3.2/cubic foot, and F31, the deepest pit, had 0.6/cubic foot. These low figures, the presence of water laid sand in the bottom of F31, and the intrusion into the clay layer indicated that the pits were not primarily meant for trash disposal and had been left open over a period of time and filled primarily by natural causes.

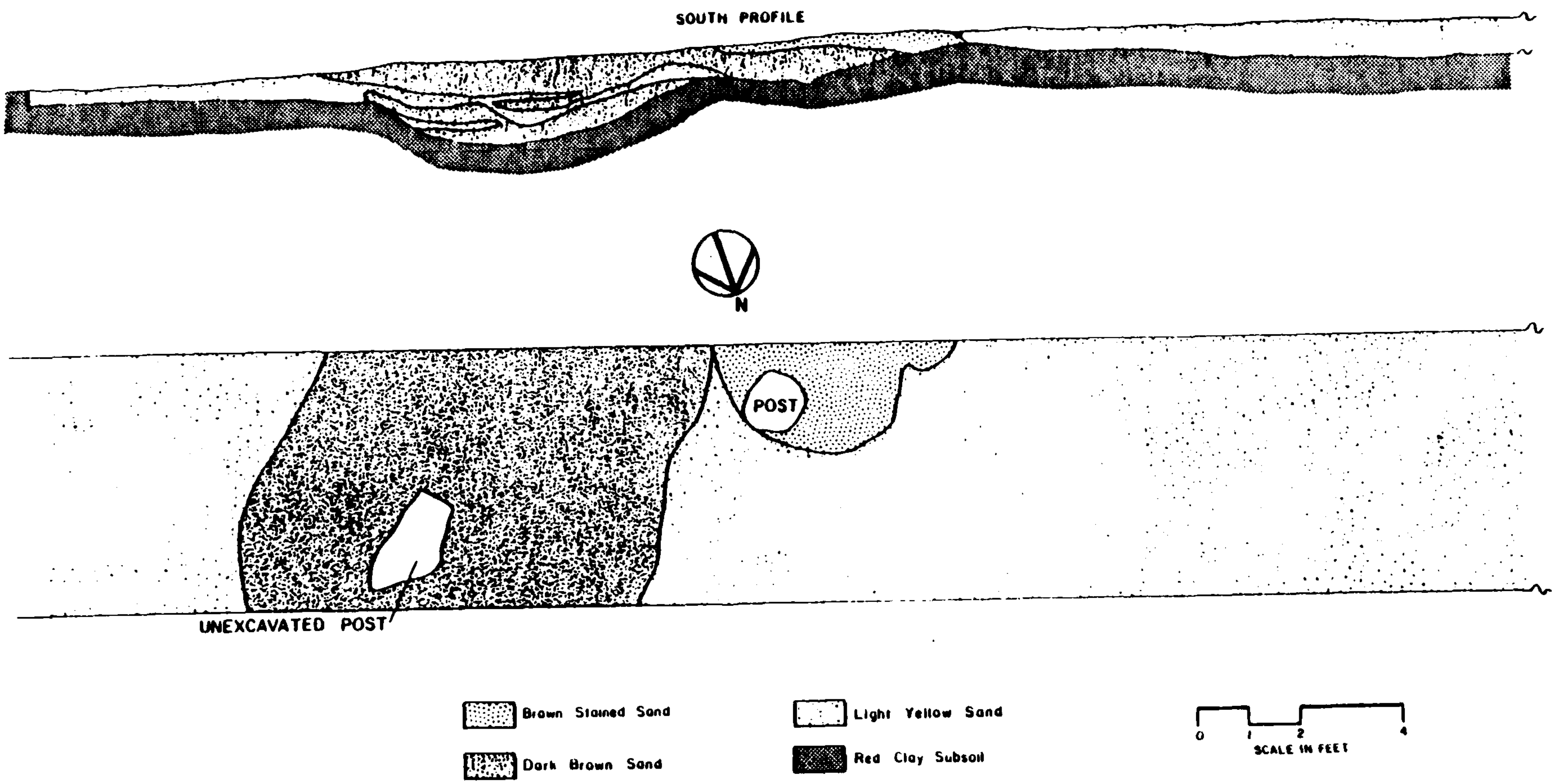


FIGURE 41
Site 38BK75
Feature F33

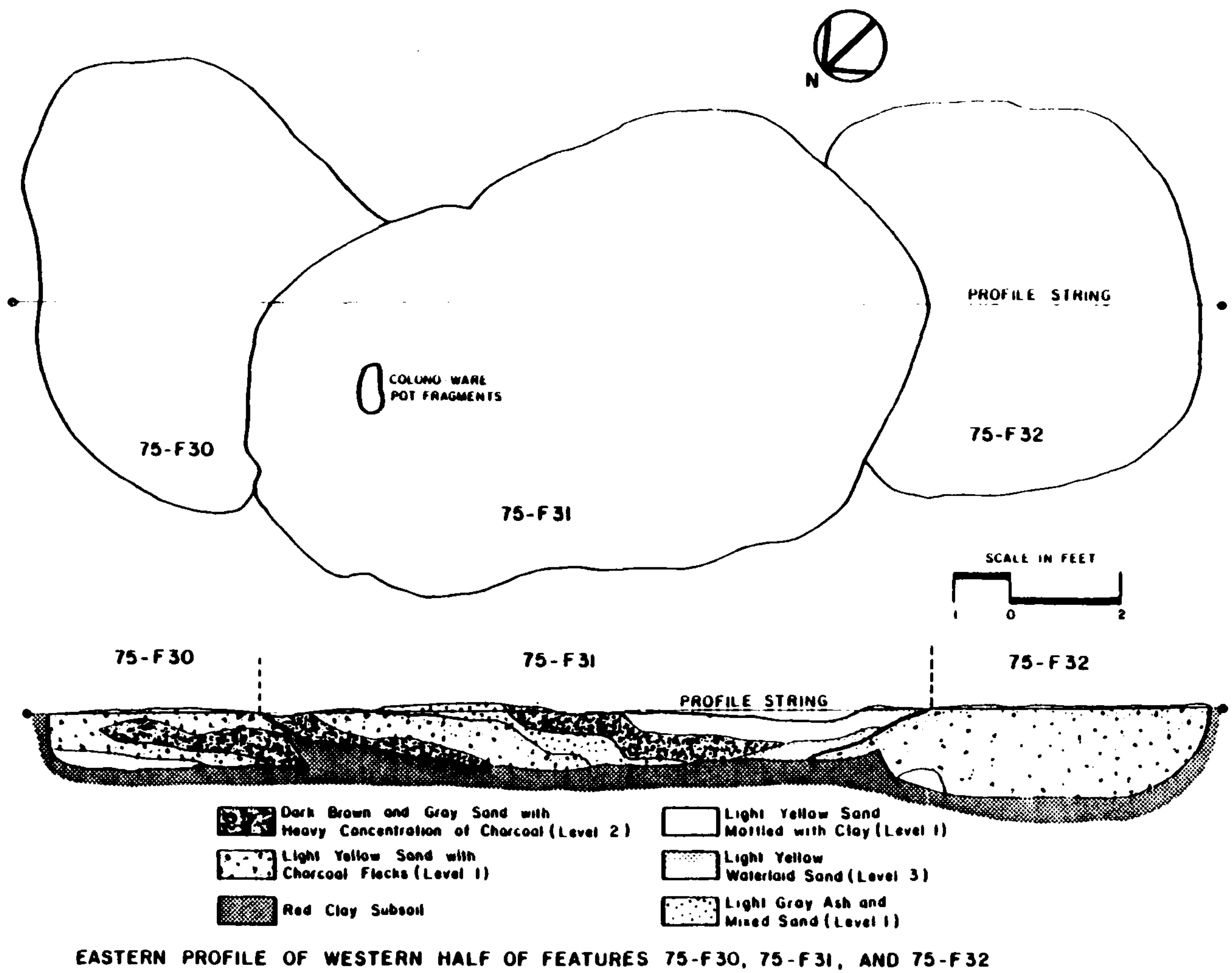


FIGURE 42
Site 38BK75
Features F30, F31 and F32
Plan and Profile

The structure in the dirt road between 38BK75 and 38BK76 (Figure 26) was found during grading of an access road for the project. Since this area was outside the archaeological project area agreed upon prior to mitigation, the area was not mechanically stripped, as was the majority of Site 38BK75. Road grading only exposed one trench, which was not excavated, and this feature, with associated postholes, was covered with red clay road fill within an hour of being exposed. A hypothetical reconstruction of the second trench noted for this structure, based on extensive experience from Sites 38BK76 and 38BK245, is presented in Figure 26. Since this was a reconstruction, no dimensional data beyond length could be given. The structure had an alignment approximately 90° off the other structures at 38BK75 and was similar to that of Structure 76L, which was oriented approximately 90° from the other structures at 38BK76. Whether this implies a similar function for the two structures or was simply personal taste on the part of the builders is impossible to say, since both structures were discovered during mechanical stripping and the house in the road at 38BK75 had only one wall exposed.

Mention should be made of a concentration of postholes to the northeast and just outside of the excavated block of Site 38BK75. This concentration was found during mechanical stripping and then mapped after shovel shaving. One apparently large feature was actually a place where the red clay subsoil naturally protruded an inch or so into the overlying sand layer and was, therefore, not a cultural feature. The posthole concentration itself had apparent regularities, but it proved impossible to distinguish a clear three or four sided structure in the concentration. Similarities of posthole shape, size, and fill were used in the field in an attempt to outline one or more structures, but without success. None of the features could be excavated during mitigation, but it is unlikely that comparisons of artifactual or chemical soil data from the postholes would be of much help in establishing a structure. This area may have represented a two-sided structure or a special use area, or perhaps animal pens or posts associated with another plantation activity.

Other postholes at the site appeared to be linear and were actually postmolds rather than holes. These undoubtedly represented fence lines as did the two postmolds in Unit 16 of the excavation block discussed above; however, it was impossible to date such features even though it is doubtful they were associated with the structures.

To the south of the excavated blocks were four trash features which were found at the end of work on 38BK75 and were therefore left unexcavated (Figure 29). With these features, Structures $75B_1$ and $75B_2$ were surrounded on all sides by such features. This is not a pattern followed at either 38BK76, 38BK245, or apparently at Spiers Landing (Drucker and Anthony 1979:91).

It is worth mentioning that South's (1977:179-182) assumption that "odorimetric" scaling is a deciding factor in discard behavior (also embraced by Lewis 1981) was not borne out at Yaughan or Curriboo. Feature F29, the feature with the most bone, was placed near the structures while features further away had little or no bone and few artifacts. This holds true with some variation at Site 38BK76 and 38BK245, as well. Drucker and Anthony (1979) note the same variation from South's scale at Spiers Landing.

Summary of Site 38BK75

Briefly summarized, excavation of this site produced five certain structures and two possible structures (the posthole concentration just mentioned and the possible floor scatter at F33). All but two of the five structures were posthole structures, and the two possible structures were also of posthole construction. The fill of the trench house at $75B_2$ was sandy topsoil and unlike the trench fill elsewhere at Yaughan and Curriboo, but similar to posthole fill. A floor scatter covered Structure $75B_2$ and indicated that a dividing wall possibly ran down the center of the structure. A hearth outside of Structure $75B_1$ was the only definite hearth found at 38BK75, 38BK76, and the slave quarters at 38BK245. The remaining non-structural features were fence posts and clay extraction pits subsequently filled with low amounts of trash. The fence posts may or may not have corresponded to the slave occupation of the site.

Site 38BK76

Site 38BK76 was located several hundred feet to the northeast of Site 38BK75. The site was lower than 38BK75 and more poorly drained; the western end of 38BK76 was inundated in the spring of 1979. The structures at 38BK76 were laid out along a slight and ill-defined rise which began at the road separating the two sites and formed a "U" terminating at Structure 76B (Figure 25). The following discussion begins at the westernmost structure, 76C, and continues across the site to Structure 76B.

The structures and features at Site 38BK76 (Figure 26) are described in tabular form on Tables 13 and 14. Artifacts are summarized on Table 15. The general stratigraphy of the site will be illustrated in detail in the discussions of Structures 76A and 76B where controlled block excavations were conducted. Structure 76C was aligned with the complex of structures termed 76DM to the southeast. This structure was not excavated and not much can be stated about the structure beyond what is presented in Figure 43.

Feature F1, located to the northwest of Structure 76C, was nearly rectangular, filled with dark brown sand and extended .64 foot into subsoil. It contained few artifacts (Table 15). Because of the low artifact count and the rather shallow depth of the feature, it did not appear to have been primarily either a clay extraction or trash pit. Since this feature was found after mechanical stripping, it is possible that clues to its function may have been destroyed.

Feature F2 was located adjacent to Feature F11, to the south of Structure 76C and west of Structure 76DM. It extended 1.2 feet into subsoil. The artifact to volume ratio was 16.96/cubic foot, which was higher than many of the features at 38BK75 and high in comparison to most of the features at 38BK76. The majority of the non-Colono Kitchen Group artifacts were olive green glass fragments, which provided a total of 22 sherds more than the Clothing, Personal, and Activities Groups combined, and accounted for more than half the Kitchen Group artifacts after Colono was removed. The only other feature with such a high proportion of bottle glass was Feature F8 near Structure 76E, which had three restorable bottles. The nearly neutral pH of the soil

TABLE 13. 38BK76 Structures

	76C	$76D_1$	$76D_2$	76M	76E	76F	76G
Construction Type (1)	T	T	P	P	T	T	T
Function	cabin	cabin?	cabin?	cabin?	cabin	cabin	cabin
Mean Ceramic Date (2)							
Length	21.5'	13.5'	17.0'	13.0'	13.0'	18.5'	14.5'
Width	11.5'	10.8'	10.5'	11.5'	11.5'	12.0'	9.8'
Orientation	247.3 sq. ft.	145.1 sq. ft.	178.5 sq. ft.	149.5 sq. ft.	149.5 sq. ft.	222A sq. ft.	141.1 sq. ft.
Structural Fill (3)	RC	M	M	M	RC	RC	RC
Recovery Method (4)	Strip	Strip	Strip	Strip	Strip	Strip	Strip
Orientation	119.8°	122.7°	123.0°	122°	120.8°	122.8°	140.7°
Post Hole Distance							
Average	unknown	2.77'	3.08'	4.80'	2.05'	1.77'	2.53'
Maximum	unknown	3.50'	4.90'	6.10'	2.40'	2.00'	3.30'
Minimum	unknown	2.20'	2.00'	3.20'	1.40'	1.30'	2.00'

(1) T = trench, P = post hole
(2) See text for basis of mean ceramic date
(3) RC = red clay, M = mixed red clay and topsoil, ST = sandy topsoil
(4) Strip = mechanical stripping, Excav = hand excavation

TABLE 13. (continued)

	76I	76J	76A	76K	76L	76B1	76B2
Construction Type (1)	P	P	T	T	T	T	P
Function	shed?	shed	cabin	cabin	cabin	cabin	cabin
Mean Ceramic Date (2)			1773.4		1787.6	1787.6	
Length	13.0'	10.0'	13.0'	18.8'	15.5'	18.1'	18.0'
Width	12.0'	8.0'	9.5'	14.0'	9.8'	11.7'	18.0'
Orientation	156.0 sq. ft.	80.0 sq. ft.	124 sq. ft.	262.5 sq. ft.	151.1 sq. ft.	212.0 sq. ft.	324 sq. ft.
Structural Fill (3)	M	ST	M	RC	RC	RC	M
Recovery Method (4)	Strip	Strip	Excav	Strip	Strip	Excav	Excav
Orientation	135.3°	46.5°	140.5°	144.3°	44.8°	143.5°	143.5°
Post Hole Distance							
Average	3.39'	unknown	1.48'	2.36'	unknown	2.44'	4.14'
Maximum	4.80'	unknown	3.00'	2.70'	unknown	3.4'	8.00'
Minimum	1.90'	unknown	0.60'	2.00'	unknown	1.2'	2.40'

(1) T = trench, P = post hole
(2) See text for basis of mean ceramic date
(3) RC = red clay, M = mixed red clay and topsoil, ST = sandy topsoil
(4) Strip = mechanical stripping, Excav = hand excavation

TABLE 14. 38BK76 Features

Feature	Function	Association	Shape	Depth Into Red Clay Subsoil	Estimated Artifacts per Cubic Foot	Fill
F1	?	Structure 76C	rectangular	.64	0.2	dark brown sandy topsoil
F2	Clay extraction/Trash	Structures 76C, 76D, and 76M	round	1.2	17.0	dark brown sandy topsoil
F3	Garden Plot ?	Structures 76D & 76M	square	.25	1.7	grey topsoil
F4	Garden Plot ?	Structures 76D & 76M	square	.30	0.4	grey topsoil
F5	?	Structures 76D & 76M	irregular	.71	0	dark brown sandy topsoil
F7	Trash pit	Postholes ?	irregular	.43	20.0	brown mottled sandy topsoil
F8	Privy ?	Structure 76E	square	1.50	51.0	very dark brown sandy topsoil
F10	Garden plot ?	Structures 76D & 76M	square	.65	0.2	topsoil
F11	Trash pit	Structures 76C, 76D, and 76M	round	.28		dark brown sandy topsoil
F12	Trash pit	Feature F13	round	.80	3.2	dark brown sandy topsoil

TABLE 14. (continued)

Feature	Function	Association	Shape	Depth Into Red Clay Subsoil	Estimated Artifacts per Cubic Foot	Fill
F13	Trash pit	Feature F12	rounded	.60	2.4	very dark brown sandy topsoil
F14	Trash/Clay extraction	Structure 76L	rectangular	.35	24.3	dark brown organic topsoil
F15	Brick pier ?	Postholes ?	square	.45		grey ashy sand
F24	?	Structure 76I	square	very shallow		brown sandy topsoil
F33	Hearth ?	Structure 76A	irregular			dark grey ashy sand
F82	Hearth ?	Structures $76B_1$ & 2	oval			

TABLE 15. Artifact Patterns by Structure and Feature at 38BK76

Provenience	76A		76B		76CDM		76F1		76F2		76F3	
	#	%	#	%	#	%	#	%	#	%	#	%
Artifact Group												
Kitchen	5108	81.45	8372	84.95	252	74.34	1	50.00	195	62.10	1	50.00
Architecture	929	14.81	1121	11.37	71	20.94	1	50.00	101	32.17	1	50.00
Furniture	2	.03	7	.07	1	.29	0	-	0	-	0	-
Arms	1	.02	2	.02	0	-	0	-	0	-	0	-
Clothing	8	.13	33	.33	2	.59	0	-	4	1.27	0	-
Personal	2	.03	2	.02	0	-	0	-	0	-	0	-
Tobacco Pipes	203	3.24	298	3.02	12	3.54	0	-	11	3.50	0	-
Activities	18	.29	20	.20	1	.29	0	-	3	.96	0	-
Total	6271	100.00	9855	99.98	339	99.99	2	100.00	314	100.00	2	100.00

TABLE 15. (continued)

Provenience	76F12		76F13		76F14		76F15		76F33		76F82	
Artifact Group	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	29	69.05	11	84.62	150	98.04	15	88.23	39	78.00	31	96.88
Architecture	11	26.19	0	-	2	1.31	2	11.76	10	20.00	1	3.13
Furniture	0	-	0	-	0	-	0	-	0	-	0	-
Arms	0	-	0	-	0	-	0	-	0	-	0	-
Clothing	0	-	0	-	0	-	0	-	0	-	0	-
Personal	0	-	0	-	0	-	0	-	0	-	0	-
Tobacco Pipes	1	2.38	2	15.38	1	.65	0	-	1	2.00	0	-
Activities	1	2.38	0	-	0	-	0	-	0	-	0	-
Total	42	100.00	13	100.00	153	100.00	17	99.99	50	100.00	32	100.01

TABLE 15. (continued)

Provenience	76F4		76F5		76F7		76F8		76F10		76F11	
Artifact Group	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	1	100.00	79	67.52	40	78.43	1002	87.97	2	100.00	28	75.68
Architecture	0	-	33	28.21	7	13.73	108	9.48	0	-	8	21.62
Furniture	0	-	1	.85	0	-	1	.09	0	-	0	-
Arms	0	-	0	-	0	-	0	-	0	-	0	-
Clothing	0	-	0	-	0	-	3	.26	0	-	1	2.70
Personal	0	-	0	-	0	-	0	-	0	-	0	-
Tobacco Pipes	0	-	4	3.42	4	7.84	25	2.19	0	-	0	-
Activities	0	-	0	-	0	-	0	-	0	-	0	-
Total	1	100.00	117	100.00	51	100.00	1139	99.99	2	100.00	37	100.00

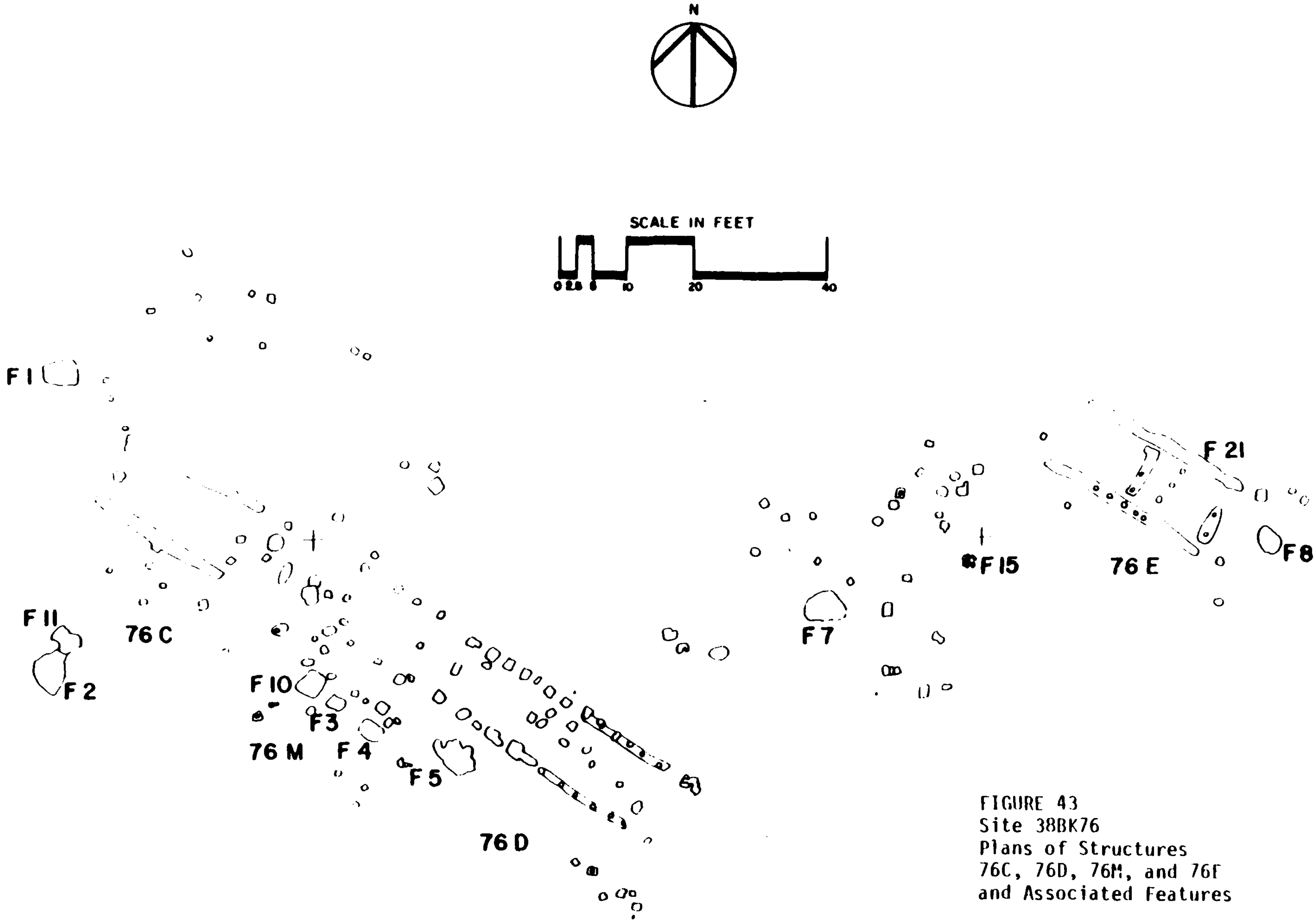


FIGURE 43
Site 38BK76
Plans of Structures
76C, 76D, 76M, and 76F
and Associated Features

indicates that bone could have been preserved in the feature, although no bone was recovered. Considering its depth and its relatively high amount of artifacts, this feature may have represented a clay extraction pit, which was later intensively used as a trash pit.

Feature F11 was very shallow, extending only .28 foot into subsoil. Artifact density could not be determined with any accuracy. Its location next to F2 may indicate it was dug and filled with debris after F2 was full. Its shallow depth indicated that it probably functioned primarily as a trash pit.

Structure 76M was located to the southeast of Structure 76C (Figure 43). Outside the southwest wall of Structure 76M was a row of postholes parallel to the wall. This row of posts was approximately half the distance from the southwest wall than the southwest wall was to the northeast wall. This spacing and the fact that no other structures were as narrow as the distance between the extra row of postholes and the southwest wall have led to the conclusion that this row represented a porch or extra room. Fill in all the postholes of Structure 76M was essentially the same, topsoil mixed with clay subsoil, which would indicate that all postholes at the structure were excavated at the same time. Structure 76M was aligned with Structure 76D, although separated from it on the southeast end by five or six feet. It is possible that the two structures were attached by a breezeway, although this is unlikely, since there are no extra support posts, which would be expected if a breezeway were present.

The artifacts summarized in Table 15 constitute all artifacts from the area around Structures 76C, 76D, and 76M, including surface collections, excavation of numbered features noted on Figure 43, and excavation of the southern trench at 76D.

Structure 76D consisted of a trench house ($76D_1$) to which a larger posthole addition ($76D_2$) was later added (Figure 43). This was made clear in the field by the nearly identical widths and alignments of the trench and posthole foundations, and by the replacement on the northeast trench of two posts by postholes with fill identical to that of the posthole structure. Apparently, when the posthole addition was added to Structure $76D_1$, certain posts of the original trench house were repaired.

The posthole addition also appeared to have undergone repair on the northeast wall as shown by an extra posthole just inside of the second posthole from the north corner of the structure. This was one of the very few examples of extra, possibly replacement posts being placed inside a structure. The adjoining wall between the posthole addition and the trench house may have been repaired also as witnessed by two extra postholes around the central posthole, one to the inside, and the other along the wall. There was also an extra posthole next to the last posthole mentioned and just inside the trench house indicating that this portion of the structure may have received extra support.

The opening between the trenchs at the southeastern end of the Structure 76D trench house had a posthole which was off-center. This may have represented a door post as well as structural support. Often off-center postholes were found at both ends of trench structures, perhaps implying two entrances.

At Structure 76D, there were also central postholes down the center of the trench structure. Three of these were well aligned and perhaps represented floor supports. The fourth may have represented repair or added support. Examination of the other structures at 38BK76 shows that no other structures at Yaughan had such postholes. This indicates that either the other houses had wood floors, but they were not supported in the center, or that they had earth floors. Evidence given below suggests that they probably had earth floors.

The posthole half of Structure 76D has no central postholes. Since it can be shown that both halves of Structure 76D were used simultaneously and the interior construction differed between halves, there may have been functional differences as well. The trench half may have been used for habitation and the posthole addition for storage or some other function. Conclusions on the overall function of the Structure 76D complex will be discussed in detail later in this chapter.

Associated with Structures 76D and 76M were four large features, F3, F4, F10, and F5. The first three were associated more closely with Structure 76M and the last with Structure 76D. Feature F3 was square, shallow, and filled with sandy gray organic soil. Feature F4 was virtually identical in depth, shape, and fill, although smaller. Feature F10 was larger, but it was also square, shallow, and filled with sandy gray organic soil.

These features formed a line outside and parallel to the southwest wall of Structure 76M. Features F4, F10, and to a less clear extent, F3 were also oriented in the same manner as Structure 76M. The nearly square shape of F4 and F10 and their locations near the corners of the structure made them different from any other features at 38BK76. During excavation, it had been hoped that they represented wells or privies. Feature F4 extended .3 foot into subsoil, F10 extended .65 foot, and F3 only .25 foot, thereby eliminating that likelihood.

Chemical soil analysis was run on Feature F10, as it was the most clearly defined and deepest feature (Appendix C). It exhibited significantly less nitrogen and more phosphorus than the natural soil matrix range. Coupled with a nearly neutral pH, the potential for the presence and preservation of bone was good, but no bone was found in any of the three features. The virtual absence of artifacts and lack of bone where preservation should have been relatively good indicated that these features were not primarily or perhaps even secondarily used as trash pits. The shallowness of the features ruled out clay extraction pits, privies, and wells, and the absence of postmolds ruled out large postholes. The features may have been excavated for small gardens or flower beds.

Feature F5 was also found during mechanical stripping and may have been larger horizontally than is recorded here, since it appears to have feathered out on its northern edge. This feathering may have been due to a logging road which ran along the northern edge of the feature and caused it to be spread in that direction. At its deepest point, the feature extended .71 foot into red clay subsoil. The irregular nature of the feature made even rough computation of artifacts per cubic foot impossible. Chemical soil analysis indicated that all values were within the range of the normal soil

matrix (Appendix C). No bone was recovered, and the function of the feature is unclear.

Feature F7, located midway between Structures 76DM and 76E to the northeast, extended .43 foot into subsoil. Only the western half of this feature was excavated and profiled. This feature may also have been impacted on the surface by a logging road. Chemical soil analysis showed a normal profile (Appendix C) and no bone was recovered. A rough calculation yielded approximately 20 artifacts per cubic foot, which was higher than that for Feature F2 near Structures 76C and 76DM. The shallowness of the feature and its relatively high density of artifacts, especially Kitchen Group artifacts, indicated that the pit may have been used primarily as a trash feature.

The location of this feature almost exactly midway between 76DM and 76E made it impossible to show association with either of the structures over the other. The area immediately around the feature had a cluster of postholes in which no structural alignments could be determined (Figure 43). One reason for this may have been that the area was impacted by logging vehicles in the recent past. Although logging roads occurred over the site, this area appeared to be randomly impacted by heavy equipment or tractor ruts which may have obliterated key postholes for a structure prior to mitigation.

Feature F15 was observed after a brick was dislodged by the motor grader. Mechanical stripping near the feature ceased at this point, and the brick fragment was replaced. It was hoped that the brick would represent a pier support; however, this was not the case. The feature was a shallow (.45 foot into subsoil) square pit with large brick fragments imbedded in the surface. This was the only feature with large brick fragments at Site 38BK76. Unfortunately, no width to length to height ratios could be developed for the bricks because of their fragmentary nature, and the function of the feature could not be determined.

Structure 76E (Figure 43), located northeast of the structures and features discussed previously, had a central trench perpendicular to the axis of the structure which divided it into halves. There was also a partial trench on the southeast end of the structure. The open space remaining at the end of this end trench was less than half the width of the structure and seemed to correspond to the off-center postholes on the ends of other trench structures, such as, Structure 76D discussed above. This indicated that the open space on Structure 76E probably represented a doorway and that the shorter spaces on structures with off-center postholes also probably represented doorways.

This was the only structure at 38BK76 which had central and end trenches. It could not be determined if the structure also had a trench on the northwest end, since this end of the structure had been heavily impacted by logging equipment during a period when the area was saturated by groundwater. It should be noted that the perpendicular trenches in this structure did not touch as they did on the double bay structures at 38BK245, nor were they as regular in outline, width, or alignment as the structures at 38BK245.

There was a parallel line of three postholes across the width of the structure, in addition to the central wall. These were not placed in an optimum location for floor support, as they were too close to the central wall and probably served a different purpose. Similar lines of postholes were found at the barn and two double bay structures at Site 38BK245. These lines of postholes may have represented supports for interior walls, shelves, "built-in" tables, beds, or for hanging utensils. At the hypothesized barn at Site 38BK245, the line of postholes on the northeastern end of the structure were thought to have represented a wall separating a storage room from the larger area and perhaps served as loft supports, as well.

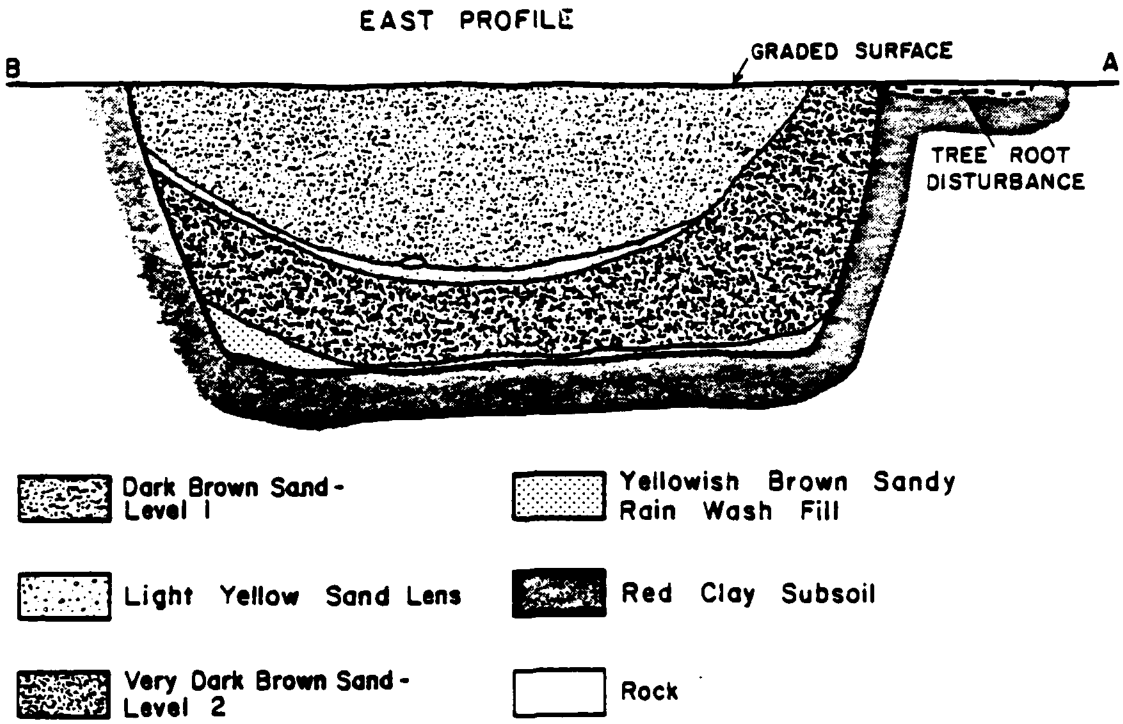
Feature F8, associated with Structure 76E (Figure 43), was distinctively square at the surface, apparently deep, and filled with a very dark organic sand, unlike the other features at 38BK76. It was first thought to be a well, but was soon discovered to extend only 1.5 feet into subsoil. The sides were neatly and almost vertically dug and the bottom was flat. Three reconstructible olive green wine bottles were recovered from the feature. The MCD for this feature is 1773.6, based on ten datable sherds.

The two main levels in Feature F8 were separated by a layer of water laid light yellow sand (Figure 44). Two of the restorable bottles came from Level 1. These were a sand pontil English style bottle and a glass or rod pontil French style bottle (Jones 1971:68-69). The third bottle was made up of sherds from Levels 1 and 2 and was a sand pontil English style bottle.

Although the pH of the feature fill was slightly acid, the total organic phosphate and carbon readings were significantly high (Appendix C). This was undoubtedly due to the relatively elevated amount of bone, 7.01 grams, found at this feature. Even though this was insignificant compared to Site 38BK245, it was the most recorded from any single feature at Site 38BK76. The two levels may have represented slightly different filling episodes, but the cross-mended bottle and the similarity in chemistry and soil color indicate that the time difference was probably short and did not represent any change in function during the pit's refill period.

The artifact to cubic feet of fill ratio of 51 artifacts per cubic foot for Feature F8 was more accurate than most, because of the feature's regularity of shape. This was the highest ratio of any feature at Site 38BK76 and overshadowed all features at the other sites.

The placement of the feature within 6.5 feet of the hypothesized door of 76F, its regular shape, the care with which it was dug, its depth, its artifact density, and high chemical values indicate that the feature fulfilled a specialized function, perhaps a privy of short duration. If this is true, it is contrary to South's (1977:179-182) "odorimetric" scaling hypothesis.



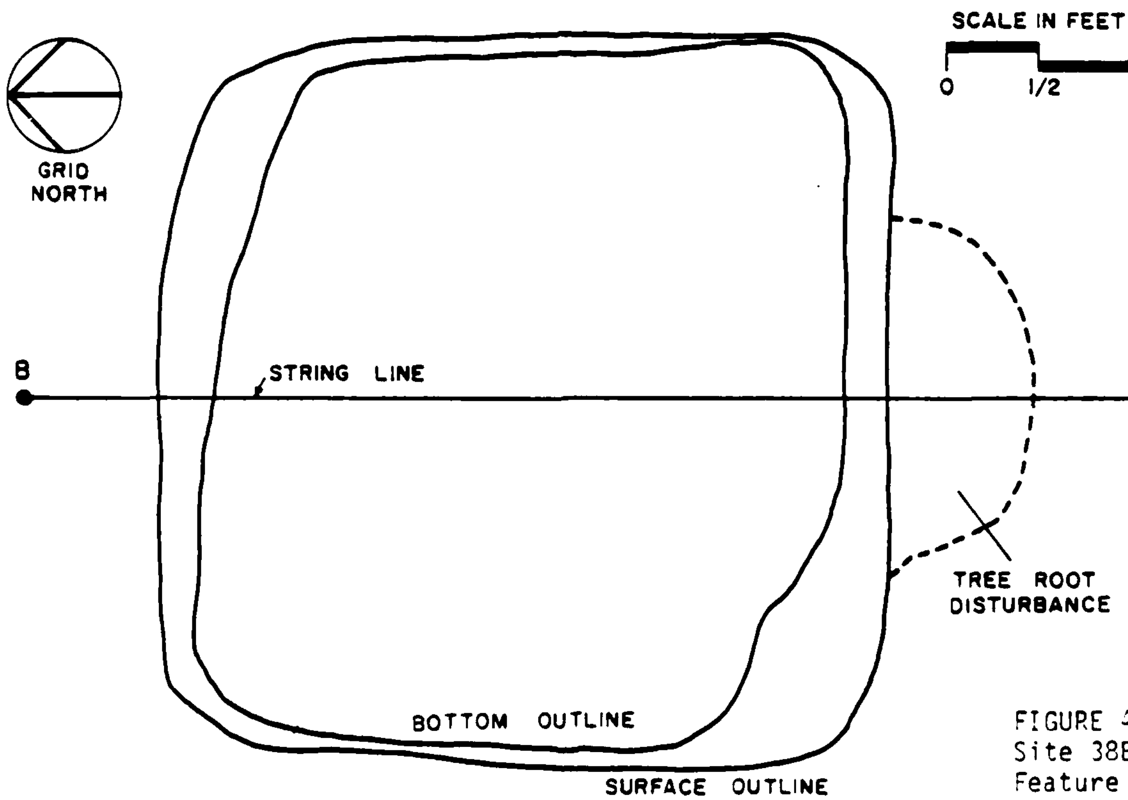


FIGURE 44
Site 38BK75
Feature F8

There were no artifacts recovered which were directly attributable to Structure 76F (Figure 45), the next structure to the east. This structure had four parallel trenches. The southernmost trenches were assumed to be the main structure, based on size and space of the area enclosed by them. The two northern trenches enclosed an area too small and narrow to be a separate structure and possibly represented a shed addition or perhaps replacement trenches. The northeastern trench of the main structure extended to the northwest, was narrower than the remainder of the trench and appeared to correspond to three postholes at that end of the structure, forming a square. This square may have represented a porch or an additional shed. No trash features were found in association with the structure.

Structure 76G was located to the southeast of Structure 76F. It consisted of three trenches and two clusters of postholes. The main portion of the structure included the two northeastern trenches. The third trench was narrower and shorter than the other two and it is unclear whether this trench represented an additional room, a shed, or a porch. The postholes on the northwest end may have represented a porch, but those on the southeastern end are too random to form a pattern.

The feature to the southeast of Structure 76G (Figure 45) was a shallow discoloration of the soil which may have represented the very bottom of a shallow feature. This possible feature was not excavated when its depth (less than one inch) was determined.

Structure 76I appears to be a three-sided, square, posthole structure located northeast of and apparently aligned with Structure 76G. There were three additional postholes clustering around the east corner of Structure 76I, but their function did not appear to be structural (Figure 45). No artifacts directly attributable to Structure 76I were recovered. It was concluded that this structure, which lacked a northwest wall, functioned as a shed or special use structure related to plantation activities.

Feature F24 was shallow and thought at first to be a trash feature associated with Structure 76I, but no artifacts were found. Similar to the "features" in the cluster of features southwest of Structure 76G, its function is unknown.

Structure 76J, east of Structures 76G and 76I and north of 76A, had three posts along the southeast side, three on the northeast side, and three on the southwest side (counting corner posts twice). The northwest side appeared to be open, similar to Structure 76I. Other postholes in and around the structure made identification difficult, as fill in all the postholes was of the same color and texture, indicating contemporaneity.

It is conceivable that the two postholes outside the structure to the east and west supported a ridge pole for a roof or hanging utensils. If this is true, it argues for an open-sided and covered work area, since an enclosed structure would presumably have the roof supported from the inside. In any case, no artifacts in association with Structure 76J were found, nor were any features suggesting a special function such as blacksmithing, cooking, or indigo production.

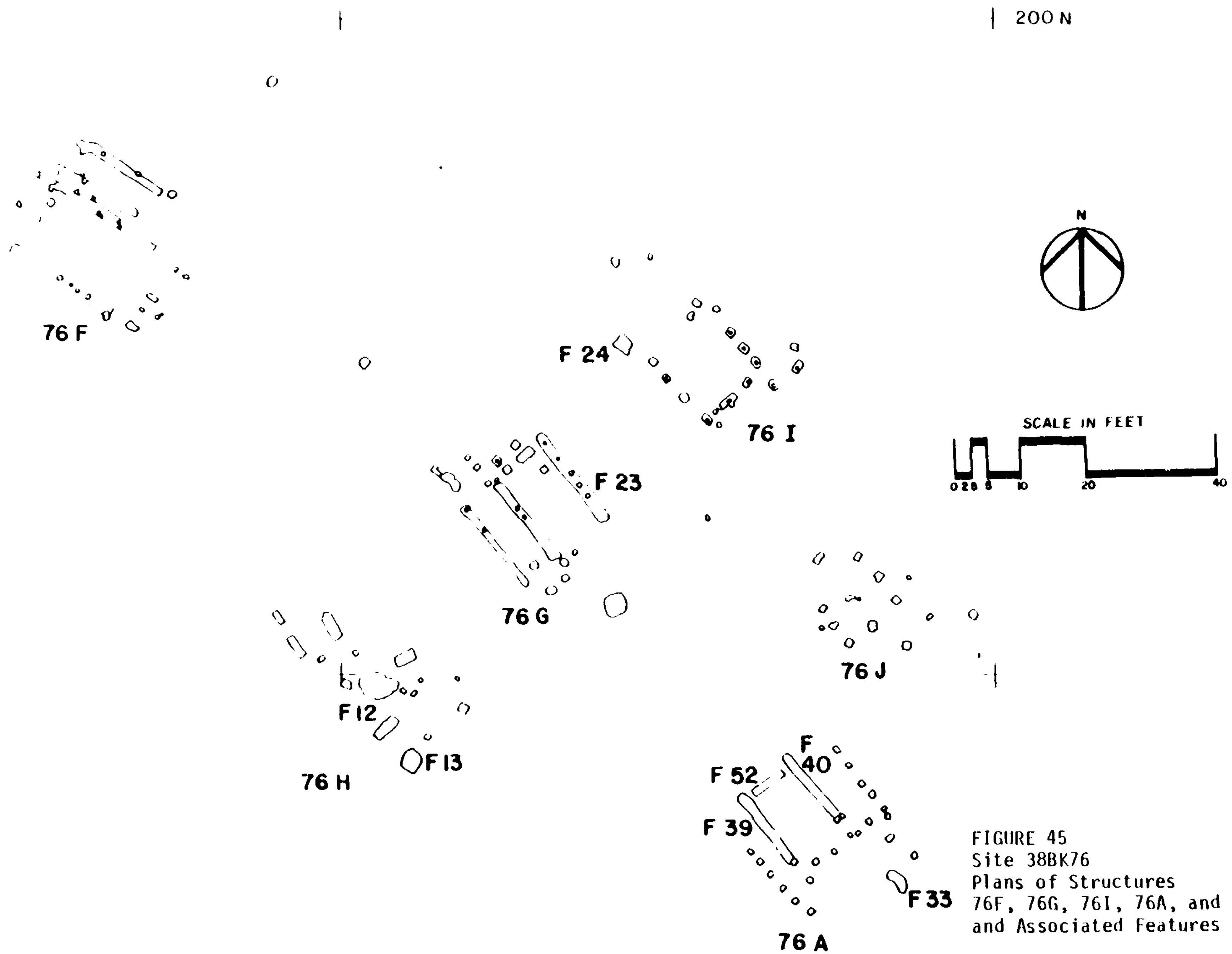


FIGURE 45
Site 38BK76
Plans of Structures
76F, 76G, 76I, 76A, and 76H
and Associated Features

Structure 76H was designated a structure for the purposes of analysis, since it presented a cluster of large rectangular features. Only Features F12 and F13 had any depth, however, and they were much larger than any structural postholes. The function of this series of features is unknown.

Feature F12 (Figure 46) extended .8 foot into subsoil. Chemical soil analysis showed that carbon was significantly high and total organic nitrogen and total organic phosphate were within the normal soil range (Appendix C). This was due in large part to the remains of a charred basket found on the bottom of the feature. The basket was first identified during excavation of the west half of the pit in the section profile. The hypothesized area of the basket, approximately one foot by one foot, was pedestaled and a cookie sheet was inserted under the pedestal. The entire pedestal and cookie sheet were then slid onto a 3/4-inch plywood board, packed in aluminum foil, and returned to the Marietta laboratory. During the analysis phase, the feature was carefully hand excavated in the laboratory. The part of the basket exposed in the cross-section did not extend more than 1/4-inch into the pedestal. Since the basket had appeared to be collapsed in profile, it had been hoped that it would extend further into the pedestal, allowing for comparison with modern Gullah basketry. This proved impossible, however. From field examination, the basket appeared to have been grass bundles sewn together in coils, as are Gullah baskets. Since the in-situ position of the basket was such that close-up photographs were impossible, photographs were taken from two to three feet away; these were not detailed enough to provide additional information.

Feature F13 extended .6 foot into red clay subsoil and was semicircular in cross-section (Figure 47). Chemical soil analysis indicated that carbon was also slightly higher than the normal range for the natural soil at this site, although no organic material suggesting a basket was found. The low amount of artifacts made a case against the feature being a trash pit, but the high carbon and shallowness of the feature argue for such a determination, especially since Feature F12 also had high carbon and evidence of trash disposal. The functions of the features were tentatively identified as a trash disposal, based on their fill and depth.

Structure 76A, southeast of the previous structures and features (Figures 46, 47, and 31) was located during excavation of Test Unit 3, when two postholes were encountered on what became the southeast wall. Excavation during mitigation resulted in the first trench structure found on the project. Feature F40 was sectioned in order to examine its depth, form, and fill sequence. Fill was red clay with small amounts of topsoil and there was an indication of posts in the form of a darker vertical stain in the center of the feature. The excavation technique was changed from vertical sectioning to carefully excavating the trenches two or three inches below subsoil until the posthole pattern emerged. Postmolds were then excavated separately and mapped.

Structure 76A was perhaps the most repaired structure at 38BK76. All corner posts on the trenches were replaced or repaired at least once (Figure 48). The function of the small perpendicular trench on the northwest end of the

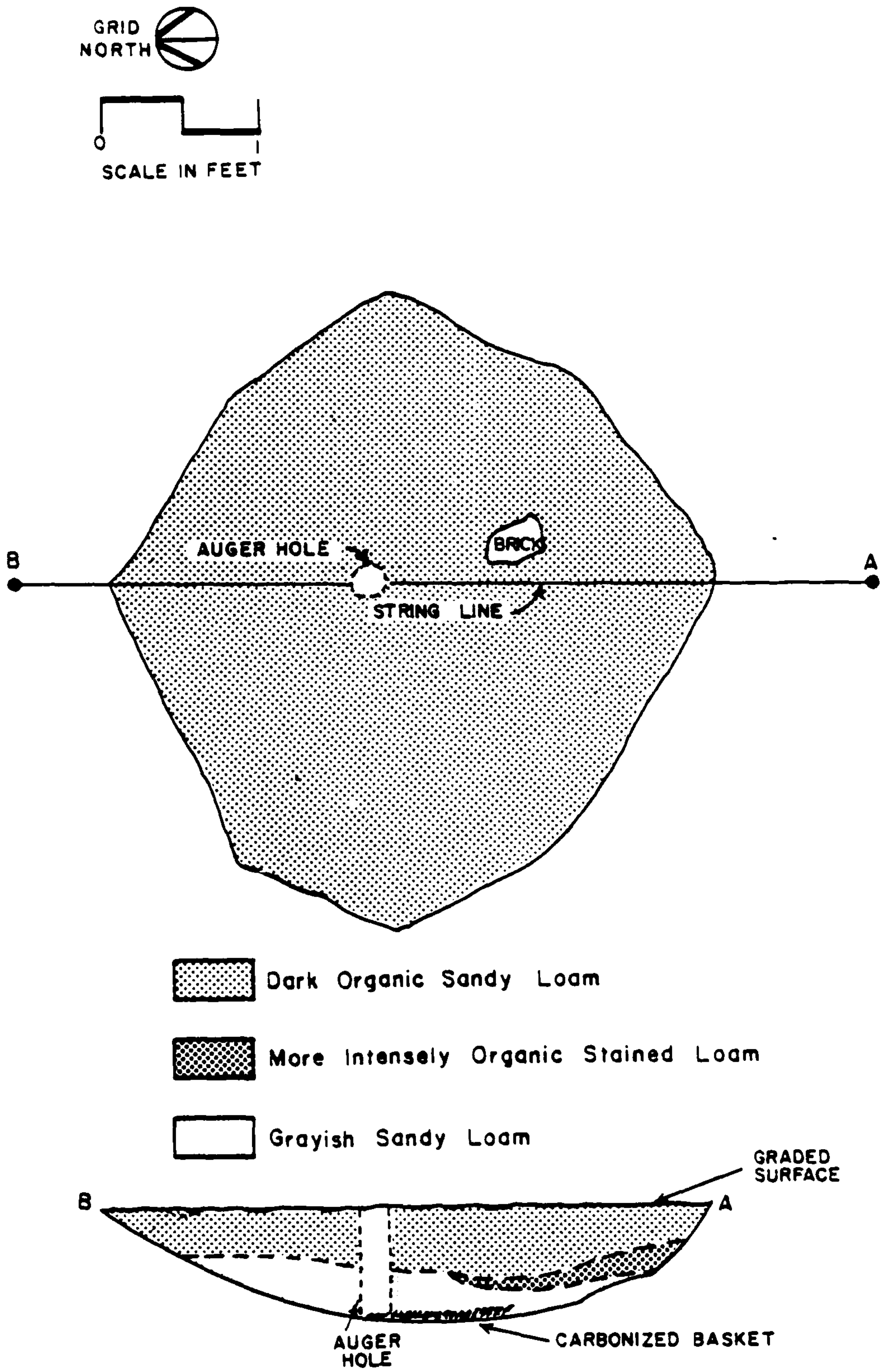


FIGURE 46
Site 38BK76
Feature F12

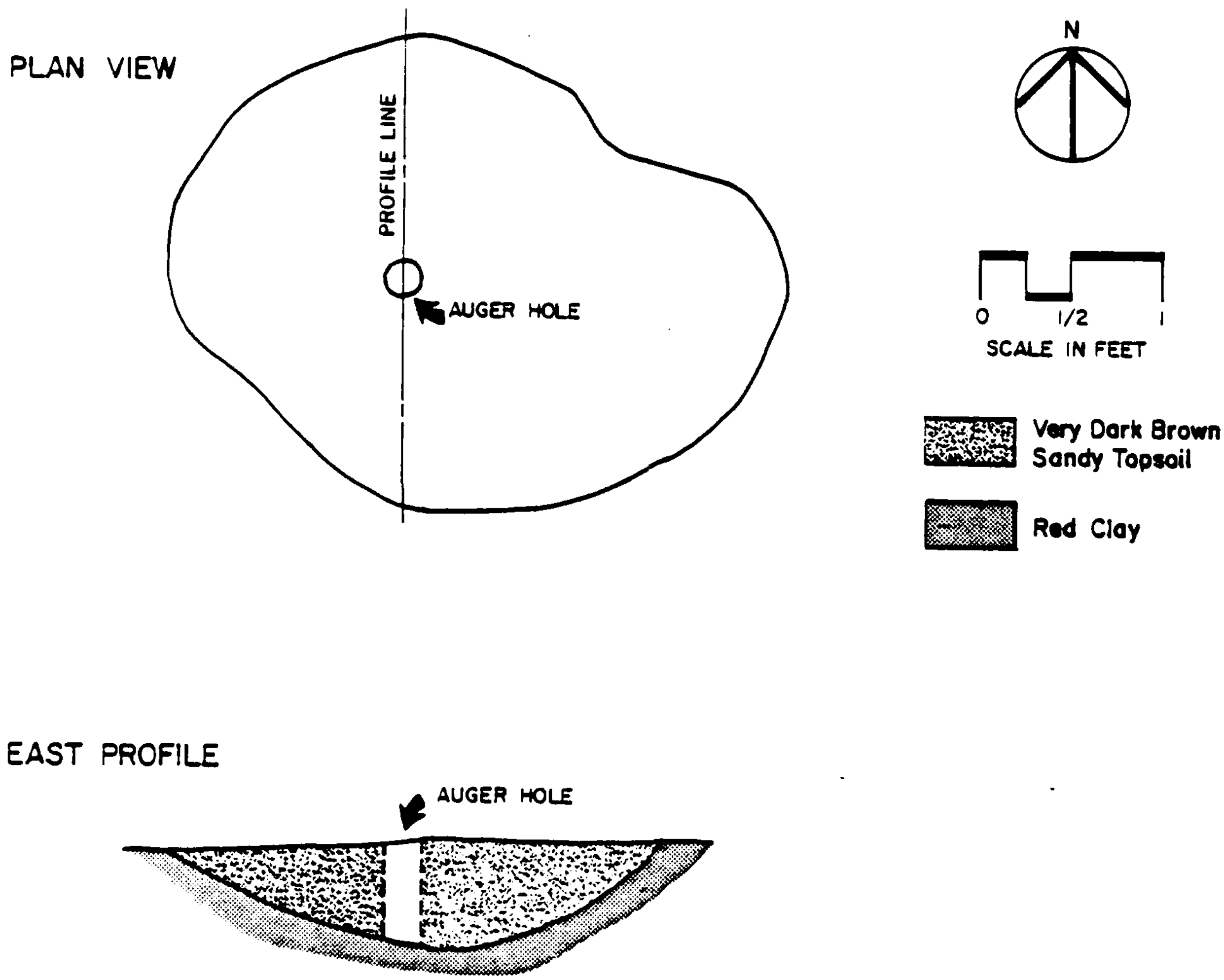


FIGURE 47
Site 38BK76
Feature F13

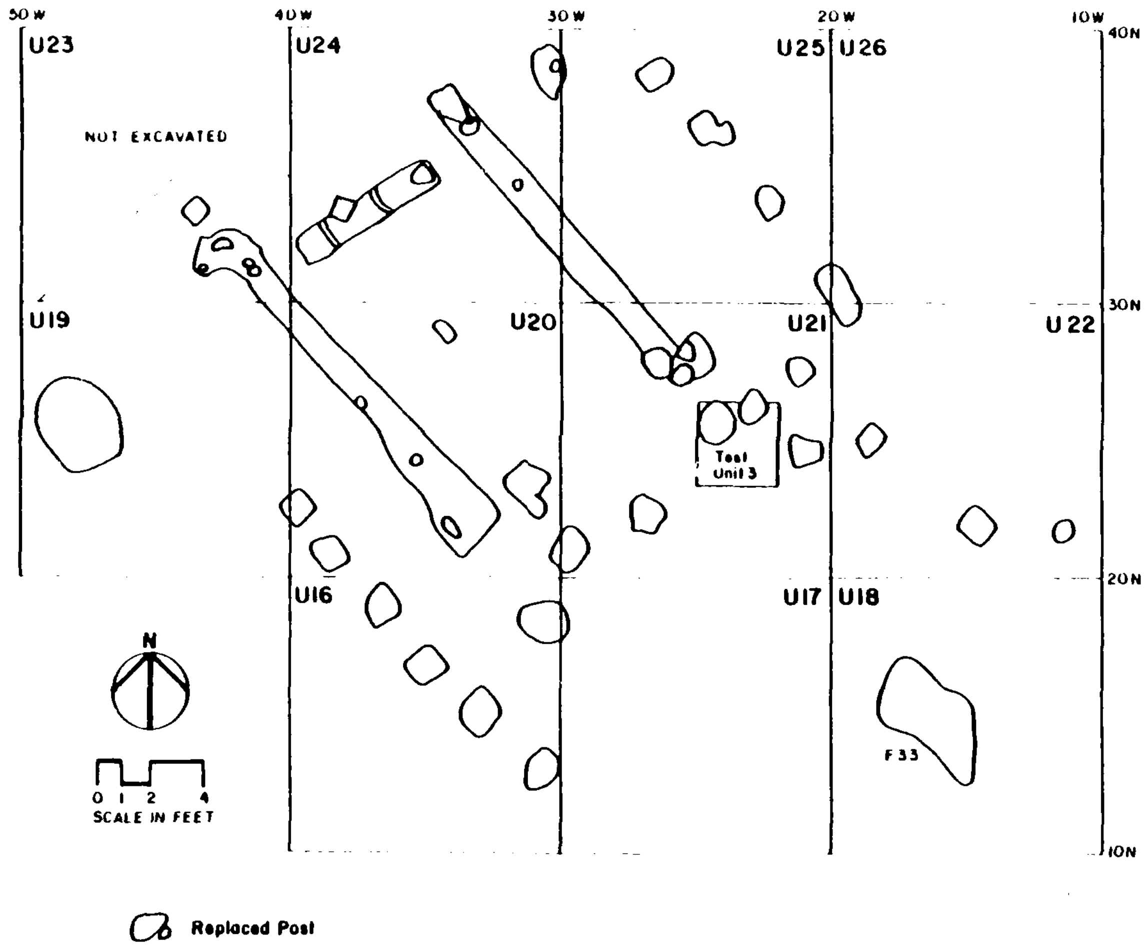


FIGURE 48
Site 38BK76
Structure 76A
Block Excavation

house was at first thought to be the remains of a chimney foundation. Complete excavation showed this to be in error, and it is now recognized that the trench was an end wall similar to that at Structure 76E.

When calculating length to width ratios and floor space noted in Table 13, the trench structure alone was used, as was the case with other structures containing additional walls or porches. The porch areas were added when multiple structures, two or more bays, are discussed later in this chapter.

All bone from excavated units at 76A came from Levels 1 and 2, the root mat and the dark sandy topsoil (Figure 49). This consisted of 15.49 grams of mammal bone in Level 1 (perhaps from recent hunting activities) and 2.2 grams in Level 2 of which 1.9 was mammal bone and the remainder land snail. One posthole contained an additional 3.81 grams of oyster shell.

The only possible hearth or trash feature at Structure 76A was Feature F33, which was shallow (.25 foot into subsoil) and filled with ashy soil (Figure 50). The feature was deeper at the northwest end and feathered out towards the southeast. The amount of total organic carbon in the feature was more than twice two standard deviations above the mean for the surrounding soil (Appendix C). Carbon was also higher at this feature than at Feature F25 at 38BK75, the hearth at Structures $75B_1$ and $75B_2$. No bone was recovered from the feature. There was no fired clay or large pieces of charcoal in the fill, which indicated that the feature may have been an ash dump rather than a hearth. The low amount of kitchen and colono artifacts (Table 15) also argues against the feature's use as an open air hearth. It is possible that the feature represented a soap making feature such as that found by Drucker and Anthony (1979) at Spiers Landing. This might explain the low amount of Kitchen Group artifacts.

Structure 76K, south of Structure 76A, was a typical trench structure with postholes near one end, but there were two parallel trenches on the southwestern wall (Figure 51). Where these two trenches touched or nearly touched, it appeared that one of the trenches was built as a replacement; however, a logging road had heavily damaged the trenches, making interpretation impossible. The house measurements were taken from the outside trenches which were more nearly parallel and of the the same length, and which were assumed to represent the original structure. To the northwest of the structure were three very shallow stains which were not excavated, but may be similar in function to shallow features such as Feature F24 discussed above.

Structure 76L, close to and southeast of Structure 76K, had postholes clustered on its northwest side and a smaller trench parallel to the main trenches. This trench may have represented a shed addition to the structure, since it was much shorter than the other trenches and far enough away to allow for usable space between it and the main structure. The two main trenches were used for house measurements. This structure was oriented at 90° to the other structures at 38BK76, which may imply a different function, or simply personal taste of the builder, if such was allowed by the owner. Orientation of all structures is discussed in detail at the end of this chapter.

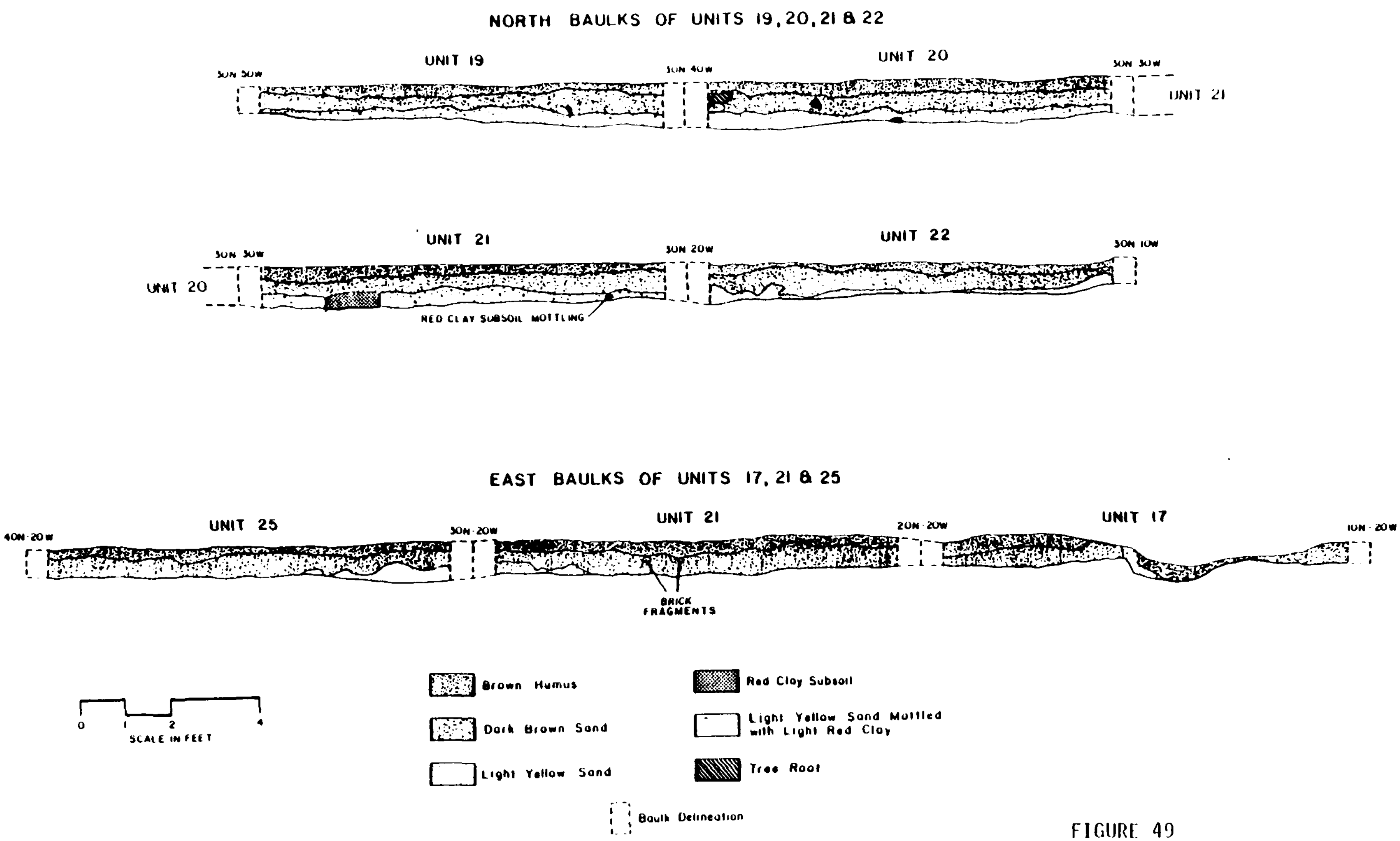


FIGURE 49
Site 38BK76
Structure 76A
Block Excavation
Profiles

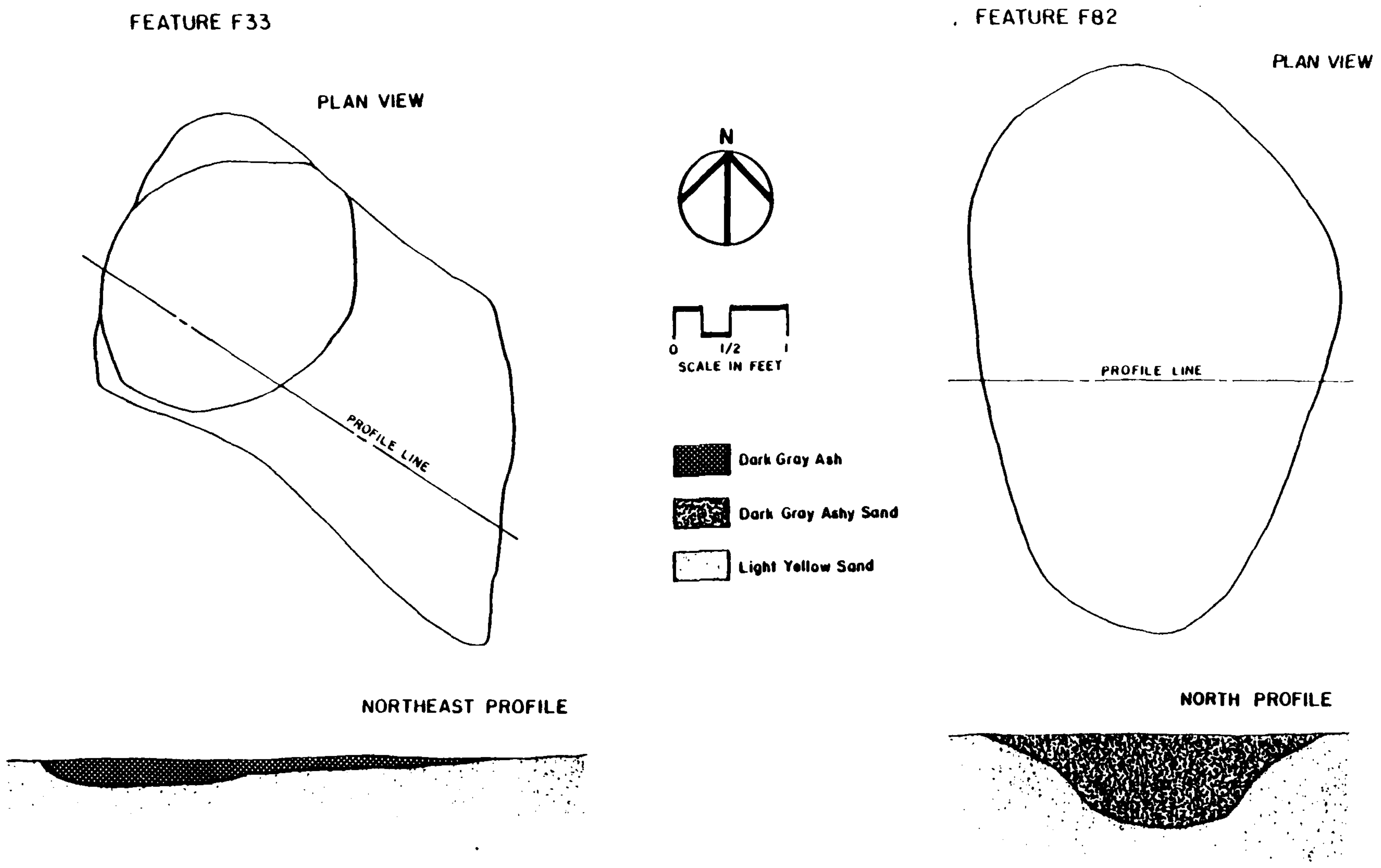


FIGURE 50
Site 38BK76
Features F33 and F82

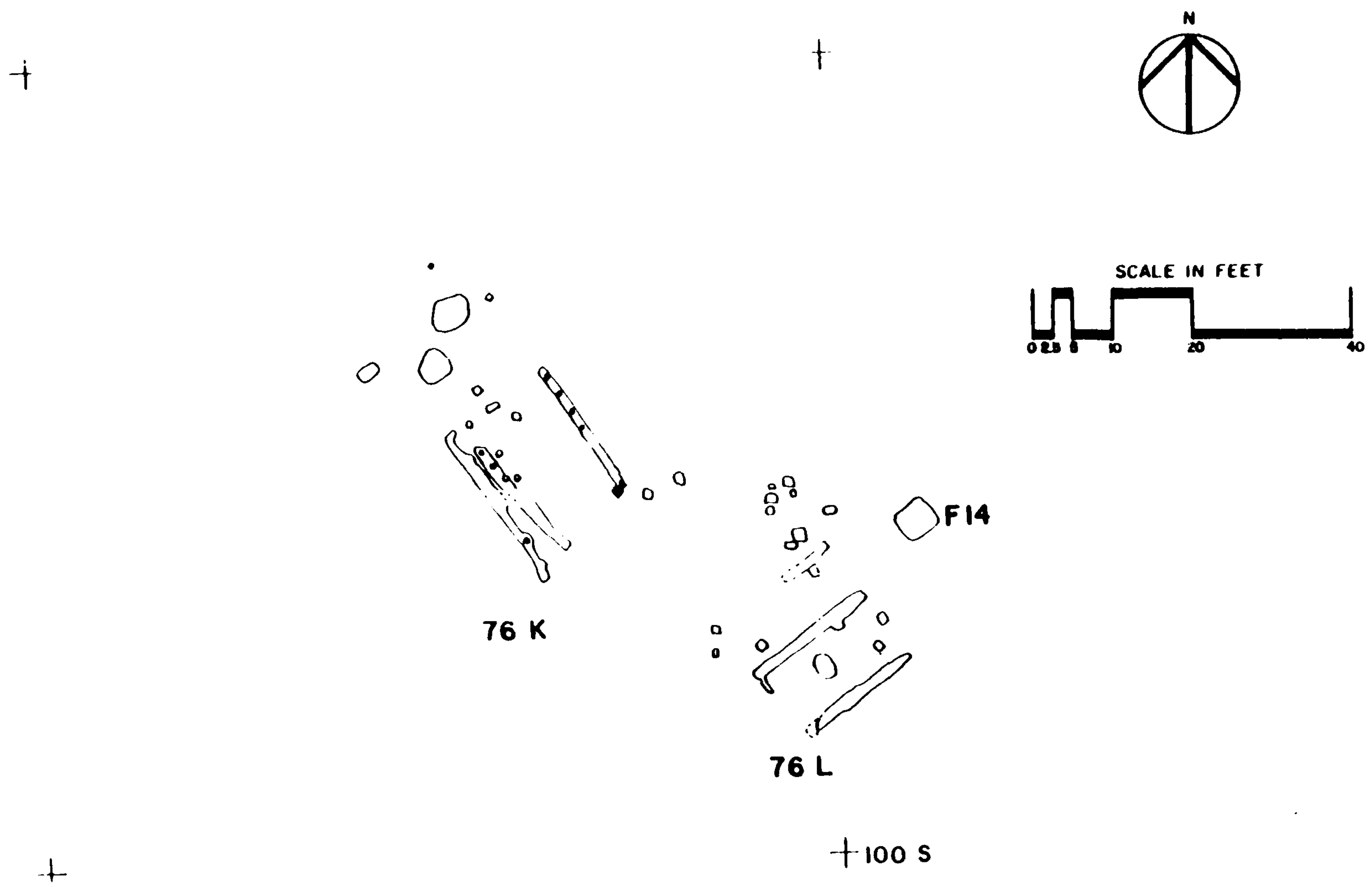


FIGURE 51
Site 38BK76
Plans of Structures 76K and 76L
and Associated Features

Feature F14, presumably associated with Structure 76L, yielded a nearly complete Colono pot. The pot was very friable and crudely made, and it resembled a beginning potter's attempt at a cooking pot. Most of the Kitchen Group artifacts noted in Table 15 belong to this pot. The feature extended a shallow .35 foot into subsoil. Chemical soil analysis showed significantly high amounts of carbon and phosphates (Appendix C), but no bone was recovered. The feature's high carbon reading, soil, shape, and the presence of a nearly complete pot were reminiscent of Feature F12 with its carbonized basket. Both were, therefore, identified as trash pits.

Structure 76B, southwest of the two previous structures (Figure 52), was actually two structures superimposed on each other (Figure 53). This structure was found in the second and last hand excavated block at 38BK76 (Figure 54). Stratigraphy at the structure is similar, but deeper than that at Structure 76A (Figure 55). Structure $76B_2$ was superimposed on Structure $76B_1$ as indicated by intrusive postholes in the trenches of $76B_1$. Although $76B_1$ fit the pattern established for size and shape at all three sites, the larger and squarer Structure $76B_2$ did not fit the pattern and may have represented a separate barn, storage shed, or perhaps a very late manifestation of a slave cabin. There was a series of postholes along the southeastern walls of the structures which belonged to the trench structure (Figure 53). These postholes were outside a line perpendicular to the axis of the structures. Postholes F96 and F98 strikingly resembled the porches or stoops of the two structures at Structure 75B and those at Structure 76G. These postholes clearly aligned with Structure $76B_1$, the trench structure, and indicated a more radical modification to the structure than the simple posthole patterns on the ends of many structures at 38BK76. Since there was no evidence of fired clay daub excavated in that part of the block, these posts probably represented a porch rather than a wattle and daub chimney.

The mean ceramic date (MCD) for Structures $76B_1$ and $76B_2$, (1787.6) was later than that for Structure 76A (1773.4). Structure 76B was, in fact, closer to the MCD established for Structure 75B (1789.8). Since the overall MCD at Site 38BK76 was 1773.0, Structure 76B may have represented the latest occupation of the site. The much higher total of nonlocal ceramics at Structure 76B than at Structure 76A, 691 (7.0 percent) to 173 (2.8 percent), was also closer to the pattern set at Structure 75B (10.6 percent). This may have been due to the increasing availability of nonlocal ceramics over time at Yaughan plantation. This problem is discussed in more detail in the following chapters.

Feature F82 (Figure 50) may have been a hearth. Chemical soil analysis of this feature showed that carbon was significantly high and nitrogen and phosphate were within the normal range (Appendix C). This was a replication of the data for the other possible hearth at Structure 76A, Feature F33. The artifact patterns were also similar. However, Feature F82 extended .80 foot into subsoil and was much larger than F33. Feature F82 was also located within the confines of Structure 76B and not outside the structure, as was Feature F33. Feature F82 seems to have been associated with the posthole structure, $76B_2$, rather than with the trench structure due to the feature's

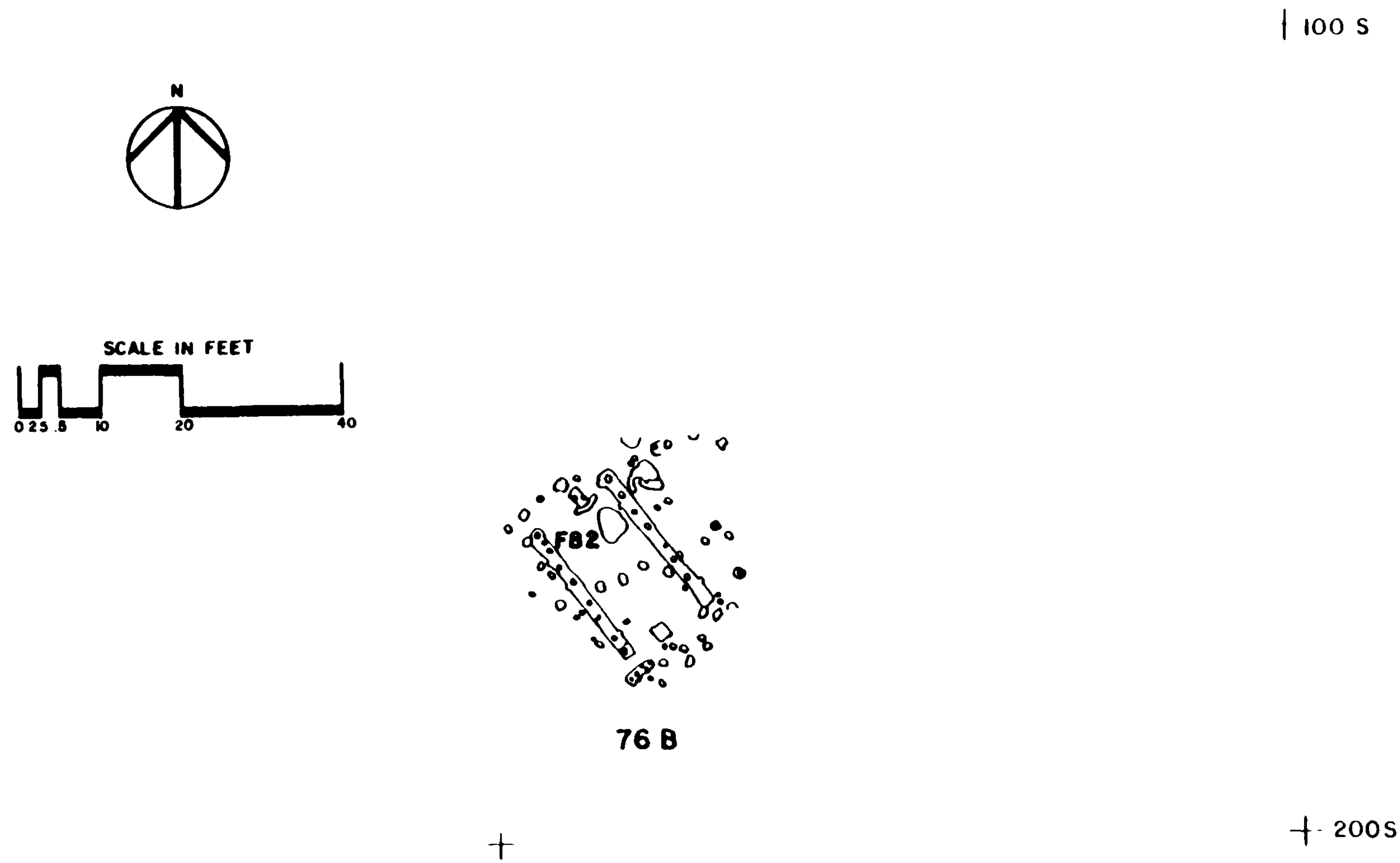


FIGURE 52
Site 38BK76
Plan of Structure 76B

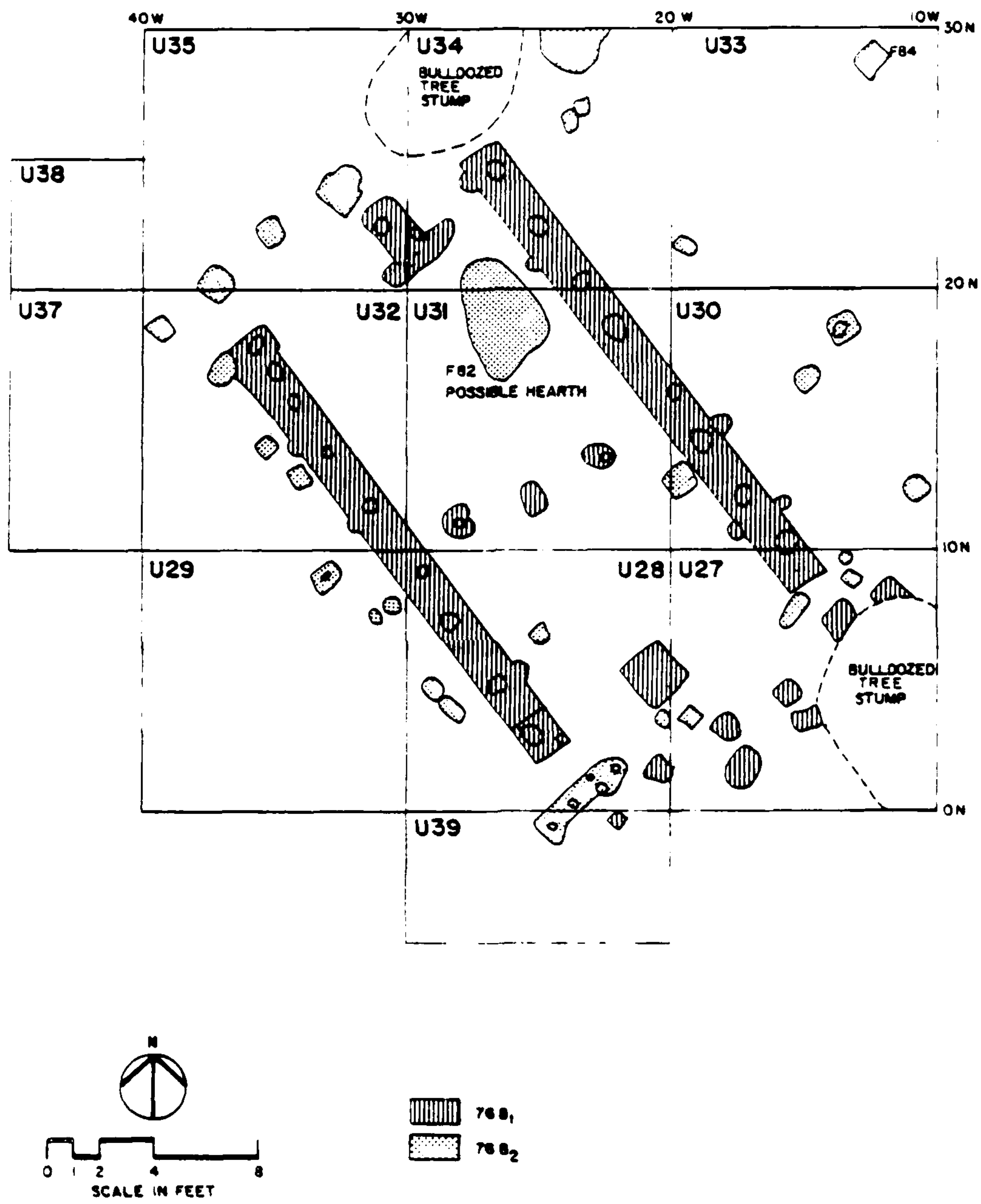
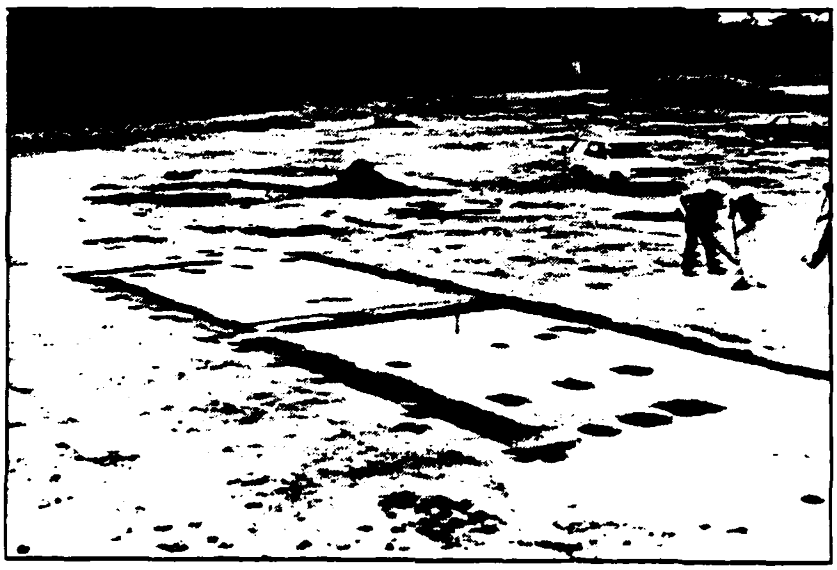


FIGURE 53
Site 38BK76 Structure $76B_1$ and $76B_2$
Block Excavation

STRUCTURE 76B
LOOKING NORTHWEST



STRUCTURE 245B
LOOKING SOUTHWEST

FIGURE 54
Photos of Structure 76B
and Structure 245B

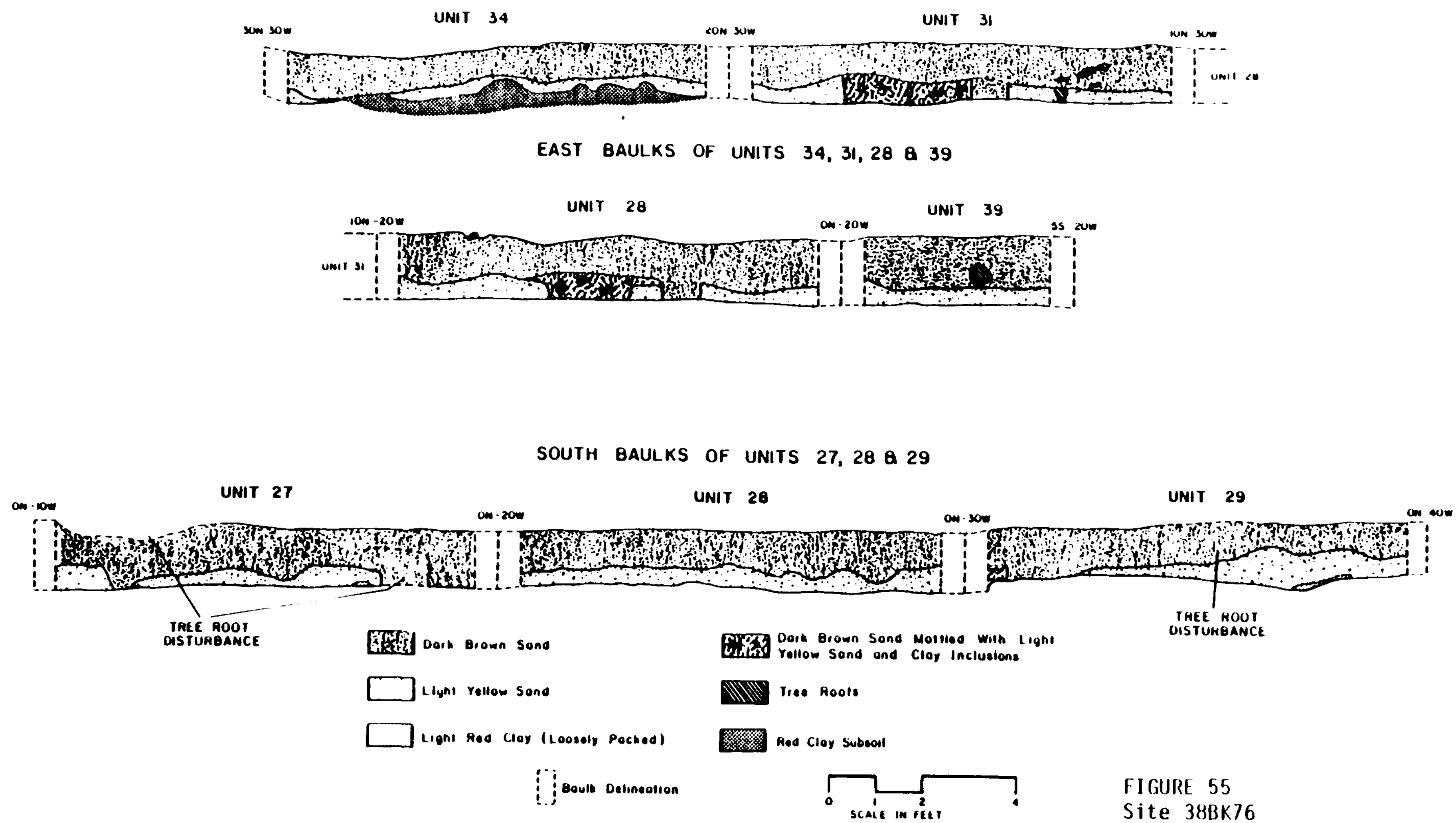


FIGURE 55
Site 38BK76
Structure 76B
Block Excavation
Profiles

location, which was more symmetrical in relation to Structure $76B_2$ than was the case with Structure $76B_1$. Of the 31 Kitchen Group artifacts associated with the feature, 29 were colonoware and none were nonlocal ceramics. This tentatively argues for an earlier date for the feature and, hence, an association with the earlier trench structure. Although Feature F33 at Structure 76A had no seeds, Feature F82 yielded 73. Half of the seeds found in the feature were unidentifiable. Of those identified, two were rice, one was maize, five were legumes, and 37 were unidentified grasses. This feature may have been used as a hearth as the carbon and seeds suggest. However, no burned clay daub was found as would be expected in a hearth. It should be noted that this was only one of two features, besides postholes, found inside structures at 38BK76 or 38BK75. The other structure with an interior feature was Structure 76L, which contained a shallow round feature. This feature was not excavated, but was filled with brown organic topsoil, and not grey ashy fill.

Summary of Site 38BK76

This site produced 13 structures, three from hand excavated blocks and ten from mechanical stripping and shovel shaving. Eight structures were primarily or exclusively trench structures (76C, 76E, 76F, 76G, 76A, 76K, 76L, and $76B_1$), one was half trench and half posthole ($76D_1$ and $76D_2$), and four structures were exclusively of posthole construction (76M, 76I, 76J, and $76B_2$). It was impossible to determine whether the posthole concentration west of Structure 76E constituted a structure because of logging disturbance. Trench fill was primarily red clay with minor amounts of topsoil. Two possible hearths were located, one outside of Structure 76A and one inside Structure 76B. Neither possible hearth followed the pattern of posts at the hearth at Structure 75B, and both identifications were very tentative. The remaining features were clay extraction/trash pits, and possibly garden plots. Perhaps some of the shallower features were exclusively trash pits.

It might be noted that clusters of three or four postholes appeared at the corners of some of the structures. These may have indicated poorly defined porches or stoops as opposed to the larger additions and/or porches at Structures 76M, 76A, 76B, 76G, and 76F. Also, Structures 76D and 76M were closely aligned and represented the single largest structural complex.

Site 38BK245

Site 38BK245 was located approximately three-quarters of a mile southeast of 38BK75 and 38BK76 and was approximately the same distance from the Santee River (Figure 1). The layout of Site 38BK245 encompassed a large, flat, mechanically stripped area on the south, a large soil borrow pit in the center, and the original ground surface on the north (Figure 27). Most of the structures discussed below were located in the mechanically stripped area. These included 245A, 245B, 245D, 245E, 245F, 245G, and 245H. Structure 245K was located on a pedestal left in the soil borrow pit and Structure 245C was in the relatively untouched area north of the borrow pit.

The structures and features at 38BK245 (Figure 27) are described in tabular form on Tables 16 and 17. Artifacts are summarized on Table 18. Generally, the site had been heavily impacted prior to mitigation by mechanical stripping of the topsoil and freezing and thawing of the exposed subsoil. It is unknown how far such stripping extended into the subsoil, but it is clear that in some areas the impacts completely destroyed parts of features. This was particularly evident in the examination of the long trenches which often became shallower at the northeastern ends until they disappeared completely (Figure 27). The stratigraphy is assumed to have been similar to that still remaining at Structure 38BK245C, although the stratigraphy at that structure was undoubtedly affected by the great amounts of brick and mortar debris present there. Structure 38BK245C represented the only block excavation at 38BK245, although a cellar and brick clamp were hand excavated in quadrants. The remaining data came from mechanically stripped areas which were only cleaned up during mitigation and from the features exposed after shovel shaving.

Since no dark brown or light yellow topsoil remained at the site, there was no standard with which to chemically compare the features in the stripped area at 38BK245. The natural soil horizons at Structure 245C could not be used for this purpose since the area around Structure 245C was heavily impacted by brick and tabby mortar debris from the chimney and piers, which could have affected the soil chemistry. Therefore, comparisons were made between the features in the stripped area at 38BK245 and all other features in that area and significance levels at two standard deviations around the mean were established.

The easternmost structure at the site was Structure 38BK245B. There was, however, a series of features to the northeast of Structure 38BK245B, which may have represented another structure. The narrow trench in this location may have been either the remains of a drip line or an irrigation ditch, whereas the postholes suggested a structure similar to 38BK245G.

Structure 38BK245B had two bays (Figure 56); Bay 1 was at the northeastern end of the structure and Bay 2 was at the southwestern end. The interior of Bay 1 exhibited two lines of postholes which may have been floor supports. The interior of Bay 2 had a line of three postholes along the southwest wall which may have reflected a function other than floor support. Replacement postholes were found along the exterior of the northwest and southeast walls and along the interior of the northwest wall in Bay 2 (Figure 56); these were indicative of extensive repair of the structure. Interior repair was also indicated by replacement postholes on the central wall on the Bay 2 side. The rows of postholes in Bay 1 and its lack of interior replacement posts, coupled with the lack of such rows and the presence of interior replacement posts in Bay 2, indicated that Bay 1 may have had a raised wood floor and Bay 2 did not. This assumes that interior replacement posts could only be placed if there was no wood floor in the way. The opening in the southwest wall showed a cluster of five or possibly six postholes in a semicircular alignment. These may have represented a porch or shed addition. There was no indication of a hearth in this area. An artifact pattern pertaining exclusively to this structure and the other structures in the stripped area could not be developed because of the nature of the impacts prior to mitigation.

TABLE 16. 38BK245 Structures

	245B Bay 1	245B Bay 2	245G	245H	245D Bay 1	245D Bay 2	245E
Construction Type (1)	T	T	P	T	T	T	T
Function	cabin	cabin	shed	barn	cabin	cabin	cabin
Mean Ceramic Date (2)							
Length	19.5'	20.5'	18.0'	41.5'	20.0'	19.8'	15.0'
Width	14.0'	14.0'	8.5'	23.8'	13.5'	13.6'	10.0'
Floor Space	273.0 sq. ft.	287.0 sq. ft.	153.0 sq. ft.	986.6 sq. ft.	270.0 sq. ft.	271.6 sq. ft.	150.0 sq. ft.
Structural Fill (3)	RGC	RGC	M	GC	RGC	RGC	RGC
Recovery Method (4)	Strip	Strip	Strip	Strip	Strip	Strip	Strip
Orientation	57°	57°	53.5°	56.5°	56.5°	56.5°	53.5°
Post Hole Distance							
Average	2.35'	2.35'	6.02'	2.36'	2.62'	2.62'	1.83'
Maximum	2.50'	2.50'	6.60'	3.50'	3.70'	3.70'	3.10'
Minimum	2.20'	2.20'	5.80'	1.50'	1.10'	1.10'	0.10'

(1) T = trench, P = post hole, B = brick pier
(2) See text for basis of mean ceramic date
(3) RGC = red and grey clay, M = mixed sandy topsoil and red clay
GC = grey clay, C = mostly or entirely red clay
(4) Strip = mechanical stripping, excav = hand excavation

TABLE 16. (continued)

	245F	245A	245K	$245C_1$	$245C_2$
Construction Type (1)	T	unknown	NA	B	T
Function	cabin	cellar	brick clamp	office?	processing
Mean Ceramic Date (2)				1771.1	1771.1
Length	16+'	±16'(5)	unknown	16.5'	over 37'
Width	unknown	±16'(5)	unknown	10.0'	11'
Floor Space	unknown	±220.4 sq. ft.	NA	165.0 sq. ft.	unknown
Structural Fill (3)	C	see text	see text	M	C
Recovery Method (4)	Strip	Excav	Excav	Excav	Excav
Orientation	54.0°	54.0°	unknown	146.0°	146.0°
Post Hole Distance					
Average	unknown	NA	NA	6.17'	unknown
Maximum	unknown	NA	NA	8.5'	unknown
Minimum	unknown	NA	NA	5.0'	unknown

(1) T = trench, P = post hole, B = brick pier
(2) See text for basis of mean ceramic date
(3) RGC = red and grey clay, M = mixed sandy topsoil and red clay
GC = grey clay, C = mostly or entirely red clay
(4) Strip = mechanical stripping, excav = hand excavation

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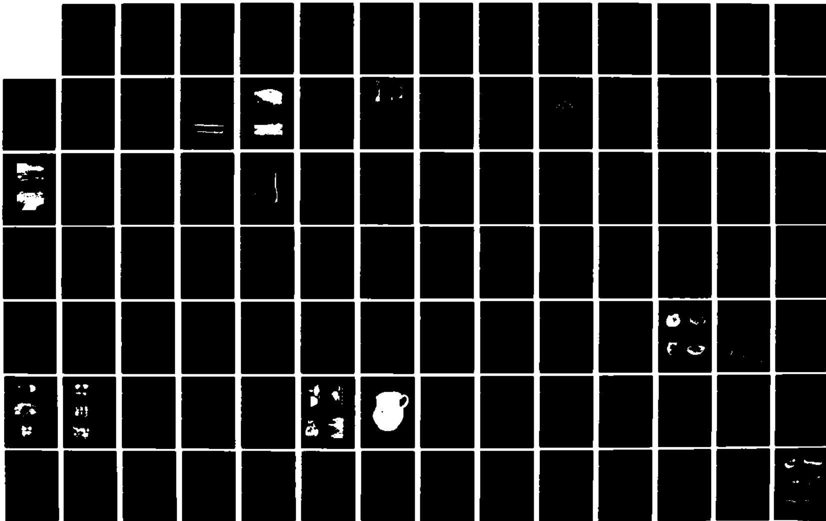


TABLE 17. 38BK245 Features

Feature	Function	Association	Shape	Depth Into Red Clay	Estimated Artifacts per Cubic Foot	Fill
F1	Trash pit	Feature F10	round	.37	16.5	grey sand
F2	Trash pit	Structures 245G	round	.45	22.4	dark grey sand
F3	Irrigation ditch	Structures 245H & 245B ?				grey sand
F4	Irrigation ditch	Structure 245H ?				grey sand
F5	Irrigation ditch	Structures 245B & 245G ?				grey sand
F6	Irrigation ditch	Features F7 & F8				grey sand
F7	Irrigation ditch	Features F6 & F8				grey sand and sandy red clay
F8	Irrigation ditch	Features F6 & F7				grey sand
F9	Irrigation ditch	Feature F10				grey sand
F10	Irrigation ditch	Feature F9				grey sand
F12	Clay extraction/Trash	?	oval	1.3	32.4	dark brown sand
F59	Manure pile ?	Structure 245H	square	.20	0.4	dark brown sand
F60	Trash pit	Feature F10 ?	round	.31	2.6	

TABLE 17. (continued)

Feature	Function	Association	Shape	Depth Into Red Clay Subsoil	Estimated Artifacts per Cubic Foot	Fill
F61	Trash pit	Feature F10	round	.23	9.8	grey sand
F62	Clay extraction/Trash	Structure 245D	round	.70	30.0	grey sand
F63	Clay extraction/Trash	Feature F10	round	1.71	5.8	brown sand and mottled brown sand and red clay
F64	Trash pit	Structure 245D	irregular	0		grey sand
F65	Clay extraction/Trash	Unnumbered ditch	round	.84	4.9	grey sand
F1	Chimney fire box	Structure $245C_1$				ashy sandy clay
F3	Hearth pad	Structure $24C_1$	irregular			grey clayey sand
F7	Cellar	Structure $245C_2$	ovoid			varies greatly

TABLE 18. Artifact Patterns by Structure and Feature at 38BK245

Provenience	245A		245A with bricks		245C		245C with cellar		245K		245F1	
	#	%	#	%	#	%	#	%	#	%	#	%
Artifact Group												
Kitchen	310	73.81	310	68.58	60	20.98	60	19.80	4	26.67	45	73.77
Architecture	92	21.90	124	27.43	208	72.73	208	68.65	8	53.33	13	21.31
Furniture	1	.24	1	.22	0	-	0	-	0	-	0	-
Arms	1	.24	1	.22	2	.70	2	.66	0	-	0	-
Clothing	2	.48	2	.44	1	.35	1	.33	0	-	0	-
Personal	0	-	0	-	0	-	0	-	0	-	0	-
Tobacco Pipes	11	2.62	11	2.43	10	3.50	10	3.30	0	-	2	3.28
Activities	3	.71	3	.66	5	1.75	22	7.26	3	20.00	1	1.64
Total	420	100.00	452	99.98	286	100.01	303	100.00	15	100.00	61	100.00

TABLE 18. (continued)

Provenience	245F2		245F3		245F4		245F5		245F6		245F7	
Artifact Group	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	70	74.47	103	85.12	19	86.36	4	66.67	90	96.77	1	100.00
Architecture	10	10.64	13	10.74	3	13.64	1	16.67	2	2.15	0	-
Furniture	0	-	0	-	0	-	0	-	1	1.08	0	-
Arms	0	-	2	1.65	0	-	0	-	0	-	0	-
Clothing	0	-	0	-	0	-	0	-	0		0	-
Personal	0	-	0	-	0	-	0	-	0		0	-
Tobacco Pipes	14	14.89	2	1.65	0	-	1	16.67	0	-	0	-
Activities	0	-	1	.83	0	-	0	-	0	-	0	-
Total	94	100.00	121	99.99	22	100.00	6	100.01	93	100.00	1	100.00

TABLE 18. (continued)

Provenience	245F61 #	245F61 %	245F62 #	245F62 %	245F63 #	245F63 %	245F64 #	245F64 %	245F65 #	245F65 %	245CF1 #	245CF1 %
Artifact Group												
Kitchen	37	88.10	260	89.35	153	70.18	8	61.54	14	32.56	0	-
Architecture	4	9.52	7	2.41	24	11.01	2	15.38	19	44.19	8	80.00
Furniture	0	-	0	-	0	-	0	-	0	-	0	-
Arms	0	-	0	-	0	-	0	-	0	-	0	-
Clothing	0	-	1	.34	0	-	0	-	1	2.33	0	
Personal	0	-	0	-	0	-	0	-	0		0	
Tobacco Pipes	1	2.38	23	7.90	41	18.81	2	15.38	8	18.60	1	[illegible]
Activities	0	-	0	-	0	-	1	7.69	1	2.33	[illegible]	
Total	42	100.00	291	100.00	218	100.00	13	99.99	43	100.01	10	100.00

TABLE 18. (continued)

Provenience	245F8		245F9		245F10		245F12		245F59		245F60	
Artifact Group	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	36	97.30	16	88.89	7	87.50	1487	79.10	4	100.00	6	66.67
Architecture	1	2.7	2	11.11	0	-	274	14.57	0	-	3	33.33
Furniture	0	-	0	-	0	-	1	.05	0	-	0	-
Arms	0	-	0	-	0	-	4	.21	0	-	0	-
Clothing	0	-	0	-	0	-	7	.37	0	-	0	-
Personal	0	-	0	-	0	-	1	.05	0	-	0	-
Tobacco Pipes	0	-	0	-	1	12.5	101	5.37	0	-	0	-
Activities	0	-	0	-	0	-	5	.27	0	-	0	-
Total	37	100.00	18	100.00	8	100.00	1880	99.99	4	100.00	9	100.00

TABLE 18. (continued)

Provenience	245CF3		245CF7	
	#	%	#	%
Artifact Group				
Kitchen	0	-	7	24.14
Architecture	1	50.00	19	65.52
Furniture	0	-	0	-
Arms	0	-	0	-
Clothing	1	50.00	0	-
Personal	0	-	0	-
Tobacco Pipes	0	-	1	3.45
Activities	0	-	2	6.90
Total	2	100.00	29	100.01

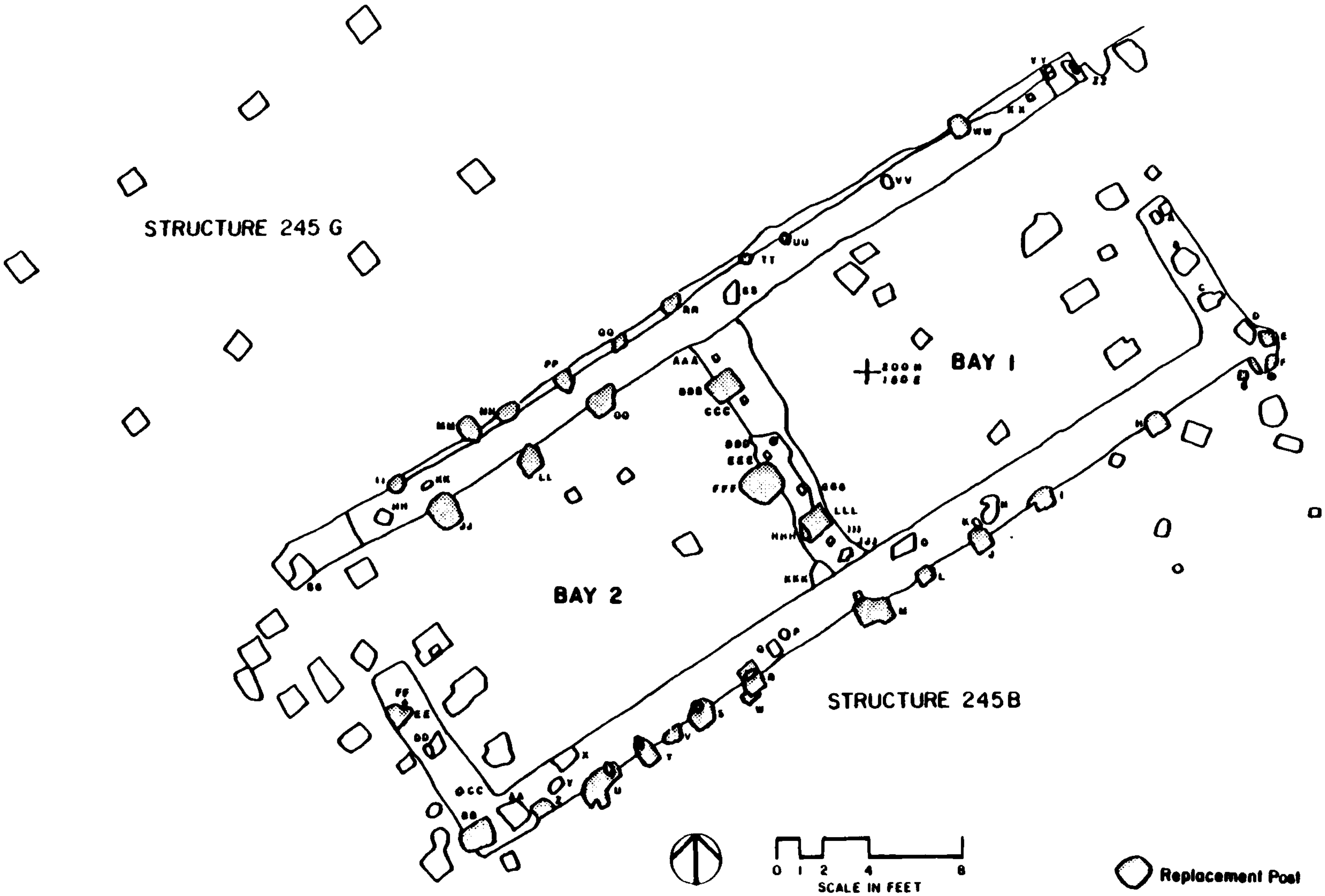


FIGURE 56
Site 38BK245
Structures 245B
and 245G

This structure, like the majority of structures at 38BK245, was better constructed than those of Site 38BK76. This is seen in the care with which the trenches of Structure 245B were dug, the careful alignment of the trenches, the use of hewn or sawed posts in some instances, the integrated end and central walls, the similarity of orientation of the structures, and the consistency of the measurements of Structures 245B and 245D, the large two bay structures, as compared to the lack of consistency of structures at 38BK76.

Excavation of Structure 245B included all isolated postholes, the replacement postholes along the southeast wall, two cross-sections of the long trenches, the northeast trench, and excavation of two to three inches of the remaining trenches in order to examine them for postmolds (Figure 54). Time spent at Structure 245C prevented complete excavation of the trenches. The fill of the trenches at 245B was remarkable for the mixture of red clay subsoil (as at 38BK76) and a dark organic, elastic gray clay perhaps obtained from the Santee River floodplain.

Chemical analysis of the trenches at Structure 245B showed that the trench fill fell within the significance limits for phosphate, nitrogen, and carbon (Appendix C). It should be noted that an extremely acid pH value very different from that of the natural soils and feature fill at both 38Bk76 and 38Bk76 characterized the entire site. This indicated that bone preservation should be very poor at 38BK245. However, there was much more bone at 38BK245 than either 38BK76 or 38BK76, despite the poor preservation potential at the former. Indeed, 294.1 grams of bone were collected from the northeast wall at Structure 245B and from postholes I and M, which represented more than the total of all features at Site 38BK75 or 38BK76. Of this bone, 286.64 grams were cow and the remainder pig. In comparison, Site 38BK75 had a total bone weight of 230.8 grams and 38BK76 had a total of 248.16 grams.

To the northwest of Structure 245B was a posthole structure, Structure 245G. This structure consisted of two parallel lines of very neatly excavated square postholes, several of which had round postmolds. The wide spacing of the postholes and particularly the fact that the northeast and southwest ends had no intermediate postholes led to the conclusion that this structure probably served a different function than the other structures at Site 38BK245. Post placement seemed to indicate an open-sided structure, perhaps a covered work area.

A small feature, probably a trash pit, was found on the western corner of Structure 245G and may have been associated with the structure. Feature F2 extended .45 foot into subsoil and was remarkable for the extremely high frequency (nearly 15 percent) of pipe parts (Table 18). This suggested that the feature was near an area of leisure time activity.

Structure 245H (Figure 57), located south of Structures 245B and 245G, was outstanding for several reasons. It was the largest structure encountered during the project, 986.6 square feet, or 662.6 square feet larger than the next largest building unit at Structure $76B_2$ (see below for a discussion of building units); it had two entrances facing the same direction (northwest), along the long side of the structure; the posts used in the construction of

the building measured 3 by 3 to 3 by 4 inches (the approximate equivalent of modern 4 by 4 posts) and were hewn or sawed; the bottom ends of the posts had been burned before placement to preserve the wood (yellow pine); and the distance between posts and the alignment of the posts in the trenches was very regular. Because it was so unlike any of the other structures in size, layout, and construction, it probably fulfilled a function different from those structures interpreted as cabins or sheds. A line of posts stretched from the southeast exterior wall almost to the northwestern exterior wall on the northern end of the structure (Figure 57). Apparently, this line of posts either separated the northern end of the structure in order to form a small room, or provided support for a loft, or both. If a small room was formed, it had a separate entrance. There may have been a line of posts running southeast to northwest across the middle of the structure, but this line was not as clear as the first. There were also other scattered posts inside the structure, but their alignment was not clear. It should be noted that in most of the structures excavated at Yaughan and Curriboo, there were few interior posts and rarely were they as clearly aligned as in the first row mentioned above. The positions of the scattered posts, so unlike the regularity apparent in the exterior walls, argues against a wooden floor.

This structure could be described as a large, well-made structure with a dirt floor, two large doors on the same wall, and a loft or small room on the northern end. The structure was sufficiently unlike the other structures to suggest that it had a different function. Three other pieces of information provided insight into the structure's function. Feature 245F59 may have represented a manure pile box and seemed to be associated with the structure (see discussion below). Structure 245C, potentially an administrative office, was located 1200 feet to the north and probably represented the northern edge of the plantation settlement. Between Structures 245H and 245C were slave houses or cabins, and between the slave cabins and the office were concentrations of brick so thick that a plow could not penetrate the soil (Joseph Cooper, personal communication) and where extensive brick and features suggest the owner's house was found during excavation of the borrow pit (unnamed construction worker, personal communication). This information would suggest that Structure 245H was not the main plantation house (it had a dirt floor and it was too far from the office and too close to the slaves), but rather a special function structure located in the slave quarter. It was too large for a corn crib or smoke house so it was concluded that it was probably a barn.

Feature F59, mentioned above, extended only .1 or .2 foot into subsoil on the northern side to less than .1 foot on the southern side. It had been heavily impacted by topsoil stripping conducted before mitigation. Unfortunately, there was so little soil in the feature that it had been screened before a soil sample was taken. No chemical tests could be run and no bone was recovered. The location and orientation of the feature clearly associated it with the barn, but its function was unclear. Because of its shape, location near and orientation with a possible barn, and the dark organic quality of its fill, it may have represented a manure pile.

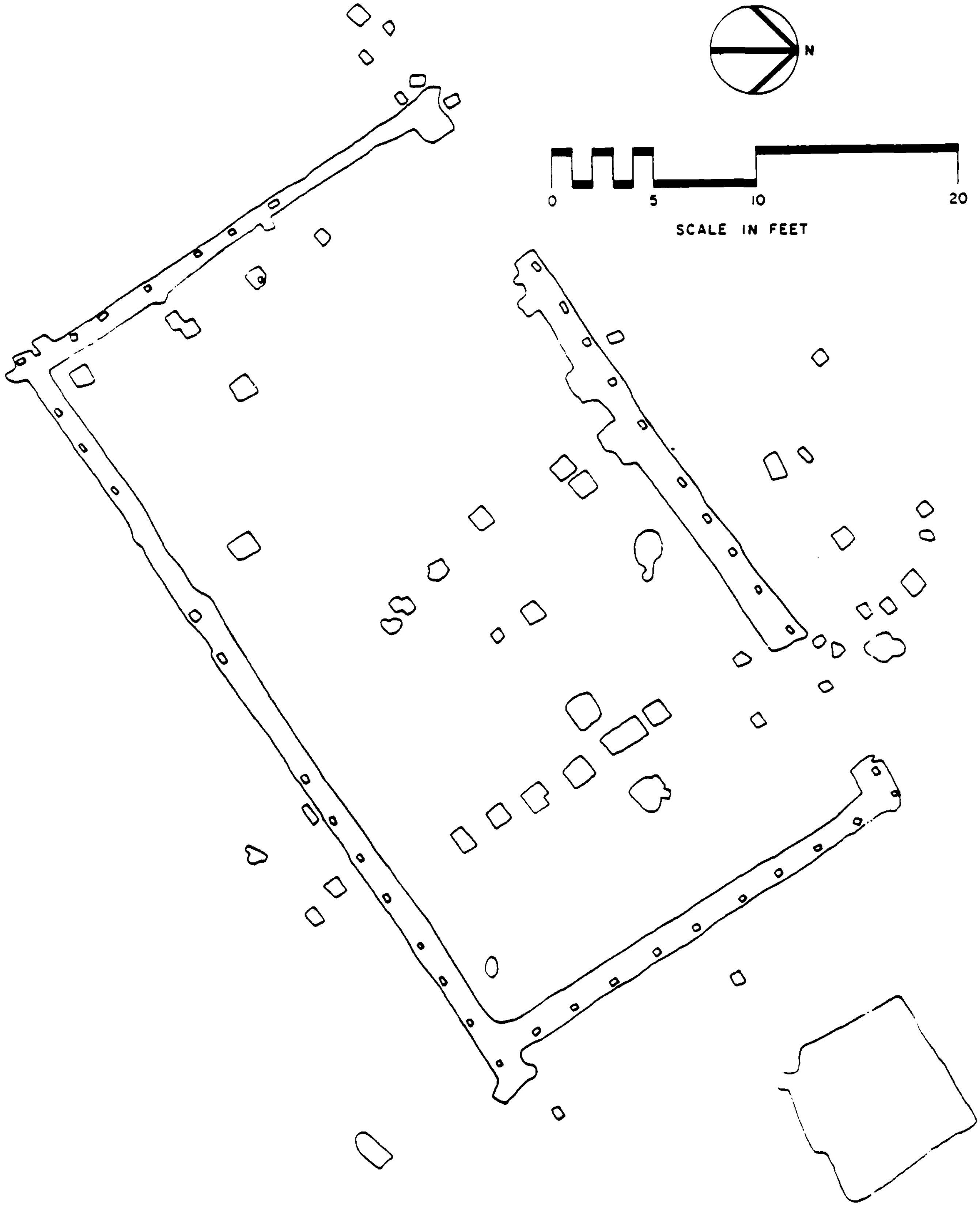


FIGURE 57
Site 38BK245
Structure 245H

Feature F12, a clay extraction/trash pit, was located equidistant to the northwest of Structure 245H and to the west of 245G (Figure 27). The feature's association was, therfore, unclear. The feature extended 1.3 feet into subsoil and contained approximately 32.4 artifacts per cubic foot. Level 1 (Figure 58) was a dark humic fill which represented the last filling episode. Level 2 was water-laid sand occurring only near the sides of the pit, and Level 3 was gray to black organic fill which represented the first filling episode. Chemical tests for all levels were within the normal range and were not those associated with good preservation (pH ranges were from 3.6 to 3.9). The feature contained 14.94 grams of bone, however. Of this, 9.49 grams were burned, which explained its preservation. Two unidentified carpal bones showed evidence of having been sawed during butchering. Animals known to be represented were pig and catfish.

The mean ceramic dates for Levels 1 and 3 were 1764.83 and 1750.33, respectively. The difference between them was 14.5 years, implying that the pit remained open for that length of time between the first and second disposal episodes. The amount of water-laid sand did not bear this out, and the difference in dates may have been linked to sample size, since Level 3 only had six datable sherds and Level 1 had 54.

This feature contained a wide variety of artifacts outside of the usual Kitchen, Architecture, and Pipe Groups, the groups where most material was found in features at 38Bk75 and 38Bk76. Level 1 contained two gun flints, one brass ring (possible harness part), one key, one sickle blade fragment, one harness buckle, and a hook-like piece of iron. Level 2 contained a gun flint and a bale seal with "W D" stamped on it. Level 3 contained a fragment of a half-round rasp and a brass furniture tack. A slate gorget of indigenous American manufacture also came from the feature, but was unfortunately not recorded by level. This wide variety of artifacts illustrated activities such as hunting, rice or indigo harvesting, care of horses or cattle, commerce, carpentry, artifact collecting, and implied others. Even the cellars at 38BK245 did not represent so many different activities.

Without block excavation of the surrounding structures (245B and 245H), a complete analysis of this feature, its function, and associations could not be made. It is evident, however, that the feature remained open or was used for a considerable length of time and was the focal point of disposal from various activity areas within the plantation.

Structure 245D was virtually identical to Structure 245B, except for its lack of an end trench on the northeast wall (Figure 59). No excavation of the trench fill was conducted, but stripping had been enough to expose the postmold pattern in the trenches. This pattern proved to be clearer than that in 245B, despite hand excavation of the latter. Interior postholes indicate that there may have been a raised floor in Bay 1 of this structure, similar to Structure 245B. Replacement posts along the interior of the southeast wall of Bay 2 and along the exterior of the northwest wall indicated extensive repair work not apparent in Bay 1.

Feature F62 (Figure 27), a clay extraction/trash pit, which seemed to be associated with Structure 245D, extended .7 foot into subsoil. Along the northern edge was a lens of light water-laid sand, indicating the pit was

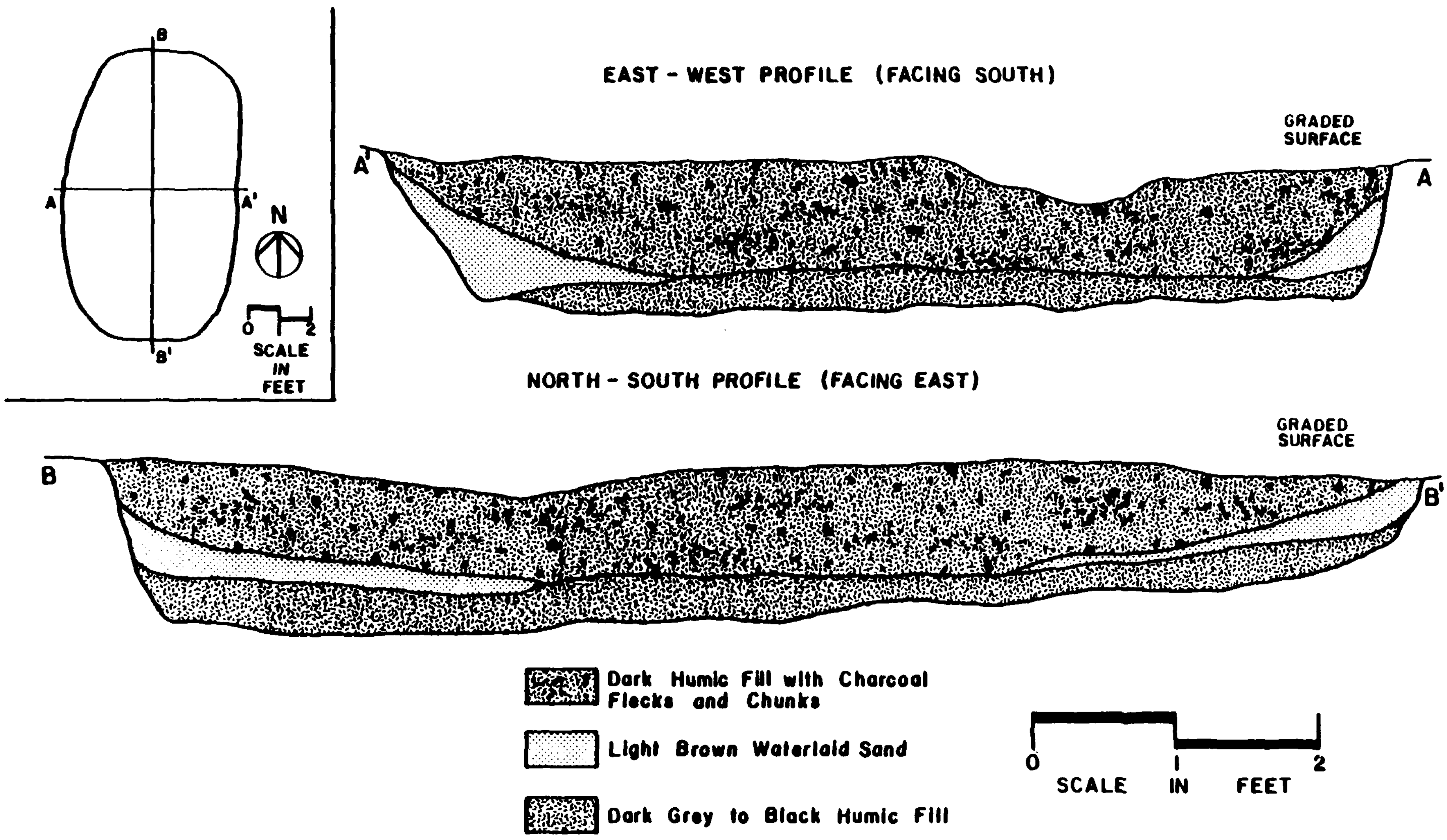


FIGURE 58
Site 38BK245
Feature F12

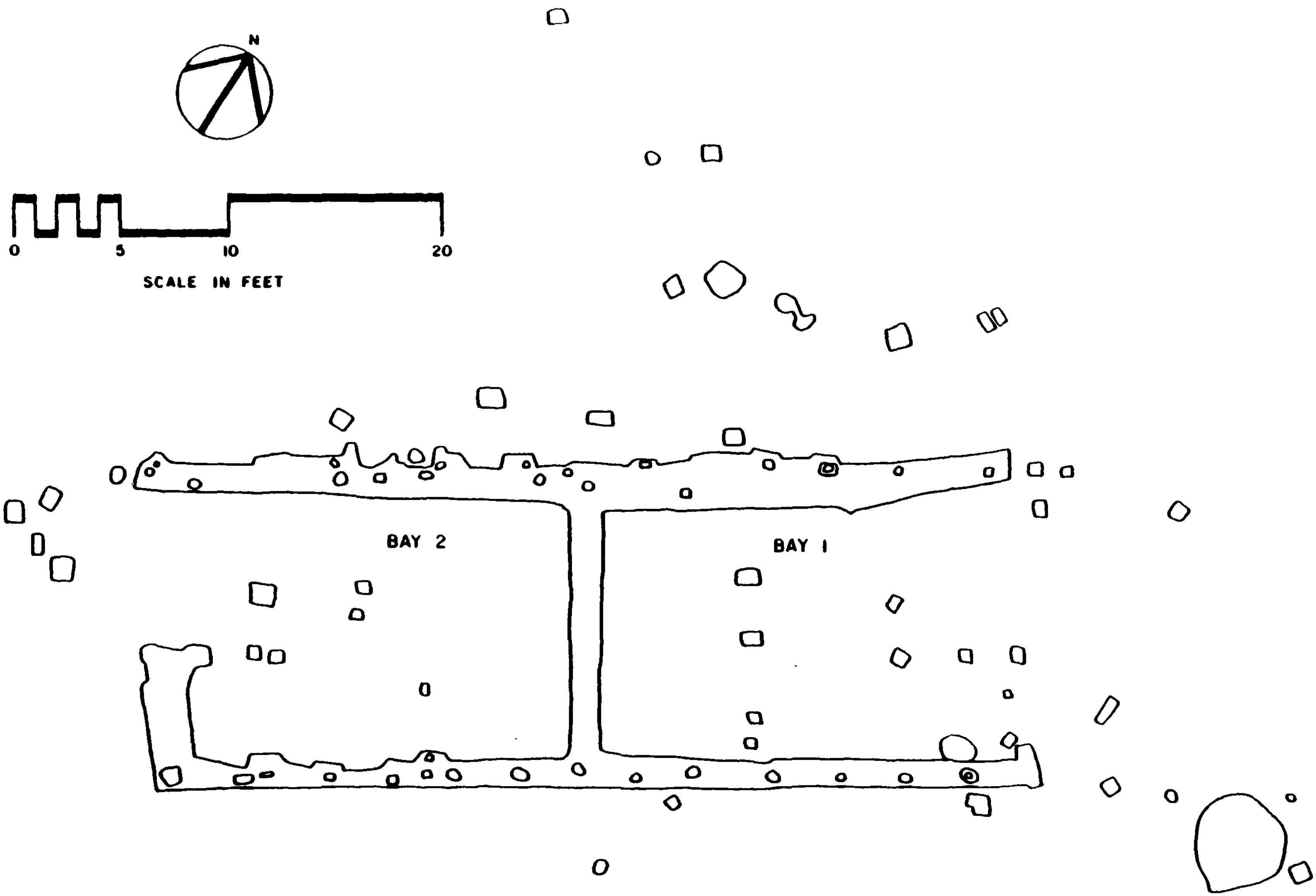


FIGURE 59
Site 38BK245
Plan of Structure 245D

open for a period before it was filled in. The approximate number of artifacts per cubic foot was 30. Chemical soil analysis of the feature showed that it was within the normal range of the features at 38BK245. Cow bones represented 52.89 grams, or the total faunal assemblage.

Feature F64 (Figure 27), a trash pit also apparently associated with Structure 245D, was a shallow amorphous layer of gray sand which did not clearly extend into the subsoil. It was treated as a feature because of a hoe exposed on the surface. In final analysis, this may have been remnant topsoil which was not completely stripped away.

Structures 245E and 245F were heavily impacted, not only by stripping, but by the parking of heavy equipment in the area before mitigation (Figure 59). The northeastern end of the northwestern trench at Structure 245E had been completely destroyed and the remaining trenches had been impacted almost to their bottoms, causing some of the irregularity in their outlines. As with the other structures in the stripped area at 38BK245, no artifacts could be definitely associated with the structure. An alignment of postholes along the exterior of the southeastern wall had no clear functional explanation. A presumed second trench and an unknown portion of the remaining trench at Structure 245F had been destroyed before mitigation. This structure could not be used for the pruposes of architectural comparison.

Structure 245A (Figure 60), a cellar, was quartered and the western and eastern quadrants were excavated by natural layers to the sand floor at the bottom of the cellar. After completion of profiles through the cellar, the north and south quadrants were excavated. There were essentially three levels within the cellar fill. Level 1 was red clay washed into the cellar hole after the building over the cellar (of which there was virtually no trace) had disappeared. Level 2 was a dark organic clayey soil with lenses of ash and charcoal which may have represented the burning of the structure. Level 3 was the one to two inch thick coarse sand floor, mixed with the red clay subsoil at their interface. Layering of Levels 1 and 2 could be noted along the northwest wall (Figure 60); this may have represented the period from abandonment to destruction of the building above the cellar. The cellar extended at least 2.2 feet into subsoil, but had been so badly damaged at the top prior to mitigation that its maximum depth could not even be guessed at. As can be seen in Figure 60, the eastern corner of the cellar was completely destroyed.

As the floor was approached during excavation, all artifacts were mapped in-situ. The artifacts represented in Figures 60 and 61 are only those which were lying directly on the sand floor. Feature 245AF1 in the north quadrant was a pile of construction debris and trash which included a restorable colono pedestal pot, a barrel hoop, stones, and bricks. Another restorable colono pot was found in Level 2. No bone was found in the cellar. The addition of bricks from the floor to the artifact pattern would result in a higher Architecture Group percentage, which may represent the cellar fill more accurately than the pattern given in Table 18. A revised artifact pattern for the cellar which includes the bricks from the floor is presented in Table 19. Even with the addition of 32 more architecture artifacts, the overall pattern still does not fit into the revised Carolina Artifact Pattern,

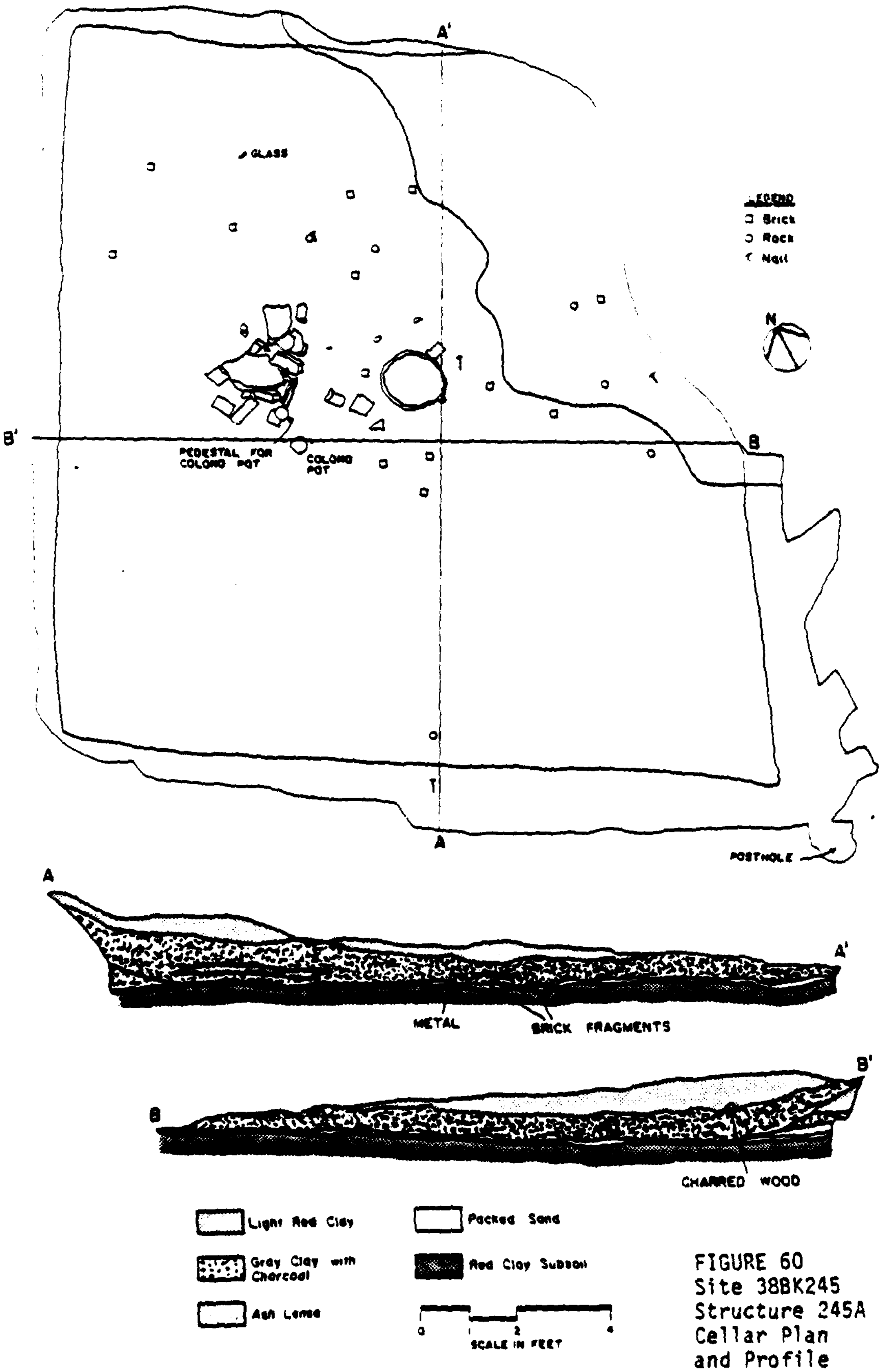


FIGURE 60
Site 38BK245
Structure 245A
Cellar Plan
and Profile

STRUCTURE 245 A
FEATURE 245 A F1
LOOKING NORTHWEST

STRUCTURE 245 K
LOOKING SOUTH

FIGURE 61
Photos of
Structures
245A and 245K

although it comes closer.

TABLE 19

Revised Cellar Artifact Pattern
(includes bricks from floor)
Structure 245A

	#	%
Kitchen	310	68.58
Architecture	124	27.43
Furniture	1	.22
Arms	1	.22
Clothing	2	.44
Personal	0	-
Tobacco Pipes	11	2.43
Activities	3	.66
TOTAL	452	99.98

Features 3 through 10 were hypothesized to represent irrigation channels or ditches running across the site, usually northeast to southwest. A five-foot section was taken from the trenches to recover artifacts and to obtain profiles and bottom depths in order to determine the direction of water flow. Most trenches were relatively shallow with neatly excavated bottoms. Often they contained a thin lens of water-laid sand on the bottom under the dark organic fill.

Feature F3 is one of eight trenches (Figure 27). This trench made a 90° turn to the northwest on its southwestern end and represented only a fragment of a more extensive trench which was destroyed before mitigation. It may have connected with Trenches F4 or F5, or both. Feature F3 flowed from the southwest to the northeast.

Feature F4 was a fragment of a trench in front of Structure 245H. It flowed from the southwest to the northeast and did not appear to have been deliberately filled with trash as Feature F3 was. A lens of water-laid sand appeared at the bottom.

Feature F5 (Figure 62) predates Structure 245B, whose northwest wall intruded into and was parallel to the trench. Water flow was again from the southwest to the northeast. The trench did not appear to have been deliberately refilled with trash. Two lenses of water-laid sand may have indicated two filling episodes.

Feature F6 (Figure 62) was the southeastern of three associated trenches. Water flow was from the southwest to the northeast. The artifact-bearing fill was underlain by a relatively thick layer of water-laid sand. Feature F7 was the central of the three associated trenches. Water flow was again from the southwest to the northeast. There were two lenses of water-laid sand; one was at the bottom of the trench and below a sandy red clay layer

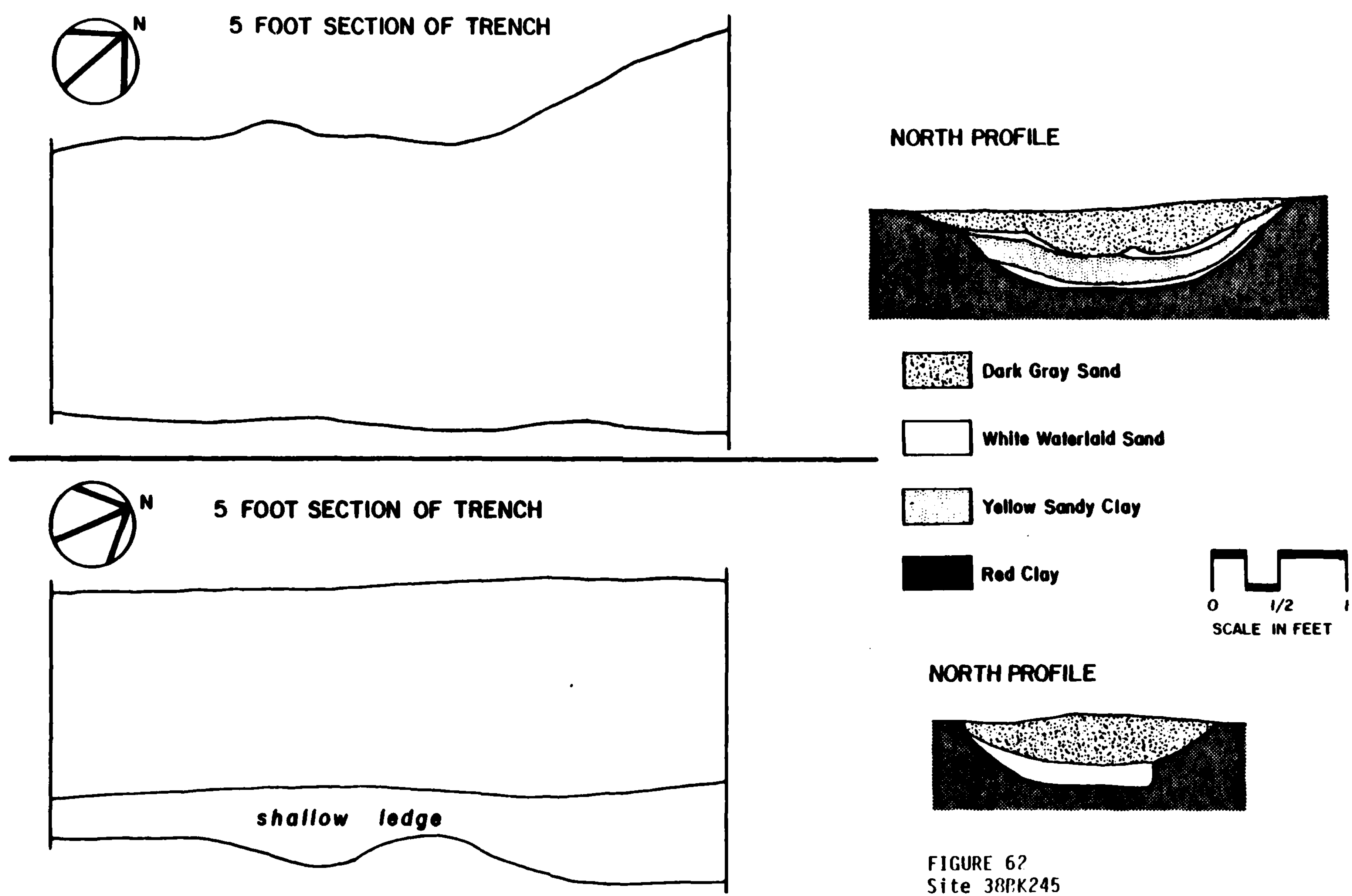


FIGURE 62
Site 38RK245
Feature F5- Trench (top)
and Feature F6 Trench (bottom)

and the second was between the sandy red clay and the gray organic soil. Feature F8 was the northwesternmost of the three associated trenches. Water flow would have been from the southwest to the northeast. A lens of water-laid sandy silt appeared on the bottom of the trench along the southeastern edge. This was the only feature that showed evidence of the shovels used to excavate the trench. There were four possible shovel cuts in the bottom made by a round-nose shovel which was curved in cross section. The shovel was at least 5-6 inches wide.

Feature F9 was one of two parallel trenches to the west of the three associated trenches. The major portion of the fill was gray organic sand. Below this was a thick lens of white water-laid sand as in most of the previous trenches, but below this lens was a layer of tan coarser sand which may have also been water-laid. The coarser material implied a faster water flow than the finer water-laid sand lenses. The direction of water flow, from northeast to southwest, was reversed for this trench and its associated trench, Feature F10. Feature F10 was the northwesternmost of the two associated trenches. The trench fill was underlain by a thick layer of water-laid sand.

These eight trenches were similar in many respects and probably fulfilled a similar primary function. This function was determined to be irrigation. This determination was based on the presence of one and sometimes two lenses of water-laid sand which implied that the trenches remained open long enough to collect such material, the evident care with which the bottoms were dug, the consistency with which the slope of the bottom was maintained, the similarity of the fill in the trenches, the relative lack of artifacts (except at F3), the length of the trenches, and the lack of postmolds in any of the trenches.

All of the trenches except F9 and F10 ran downhill from the southwest to the northeast (Figure 27). Features F9 and F10 ran in the opposite direction. The shallowest trench in absolute elevation below an arbitrary datum was F3, followed by F8, F7, F10, F4, F5, and F6; the deepest was F9. Such variation from trench to trench and from associated group of trenches to associated group argued against a single source of water supply. It had been hoped, in the field, to show how the water may have circulated from a water source at a higher elevation. This was not possible with the data at hand. The hypothesis that water zigzagged through the trenches, reversing direction in each trench, has also proved false. Apparently, there were trenches outside the project area which could answer questions of water source and circulation, but some of these have undoubtedly been completely destroyed, and the others are beyond the physical boundaries of this project.

The trenches appeared to antedate at least one and possibly more of the structures. What the trenches were irrigating is undeterminable at this time, although vineyards were suggested. Associated with the trenches were irregularly spaced postholes, which intruded into the trenches and postholes near the trenches. The purpose of these could not be determined.

Along Trench F10 on its northwestern side were four trash pits evenly spaced from the trench. These and one other pit near an unexcavated trench are discussed here because they appeared to be aligned and associated with the trenches. Feature F1, a trash pit, extended .37 foot into subsoil and had a rounded bottom. The pit contained 5.12 grams of oyster shell. Feature F60, a trash pit, extended .31 foot into subsoil and had a rounded bottom. Only the western half of the feature was excavated. Feature F61, a trash pit, extended .23 foot into subsoil. Only the west half was excavated. The similarity between these features and their shallowness suggested a line of decorative plants along Trench F10, although this is purely speculation. The shallowness of the features did seem to argue against their function as clay extraction pits.

Feature F63, a clay extraction/trash pit (Figure 63), extended 1.71 feet into subsoil and presented a more complicated stratigraphy than the other pits associated with Trench F10. The south side of the feature had a mixture of dark brown sand with lighter sand and red clay mottling, and sloped from near the top to the center of the feature. This was overlain by dark brown sand sloping in the same direction. On the top was the culture-bearing dark gray organic sand as in most other features. This layer also contained 7.49 grams of cow bone. The mixing of the bottom layer may have been the result of back-filling the hole soon after it was dug with a mixture of topsoil and subsoil. The brown sand layer was similar to existing topsoil in nearby fields and the top layer was a mixture of this topsoil and organic debris. The layers could be explained if the hole was dug, the clay was removed, the clay/topsoil interface was replaced, the unused topsoil was then replaced and the remaining space was filled with topsoil and trash at a later time. This pattern may have been the clearest example of clay extraction at any of the sites, with the exception of Features F30, F31, and F32 at 38BK75.

Feature F65, a clay extraction/trash pit, was in association with an unexcavated irrigation trench, just as the previously discussed pits appeared to be associated with Trench F10 (Figure 27). The feature extended .84 foot into subsoil, and thus was more comparable with F63 than with the other pits. It was also similar stratigraphically to F63, although soil changes were less dramatic and more a matter of degree within the gray organic layer common to the other features at 38BK245. All levels produced artifacts and layering appeared to be due to irregular episodes of filling. The most remarkable attribute of this feature was the elevated amount of Architecture Group artifacts (Table 18), which included 11 window glass sherds. This feature may have represented debris from Structure 245D. The feature also contained 2.87 grams of burned bone.

Structure 245K, a brick clamp in the large borrow pit to the north of the previously discussed structures and features (Figure 27), had been heavily impacted by excavation of a soil borrow area entirely around the feature which left it on a pedestal (Figure 61). The surface of the clamp was also scraped by a tractor, as evidenced by extensive tractor tread marks into the exposed red clay subsoil (Figure 64). Later, the clamp was covered with black plastic and sterile sand to preserve what was left until mitigation. However, as a result of extensive damage by the tractor and the shallow

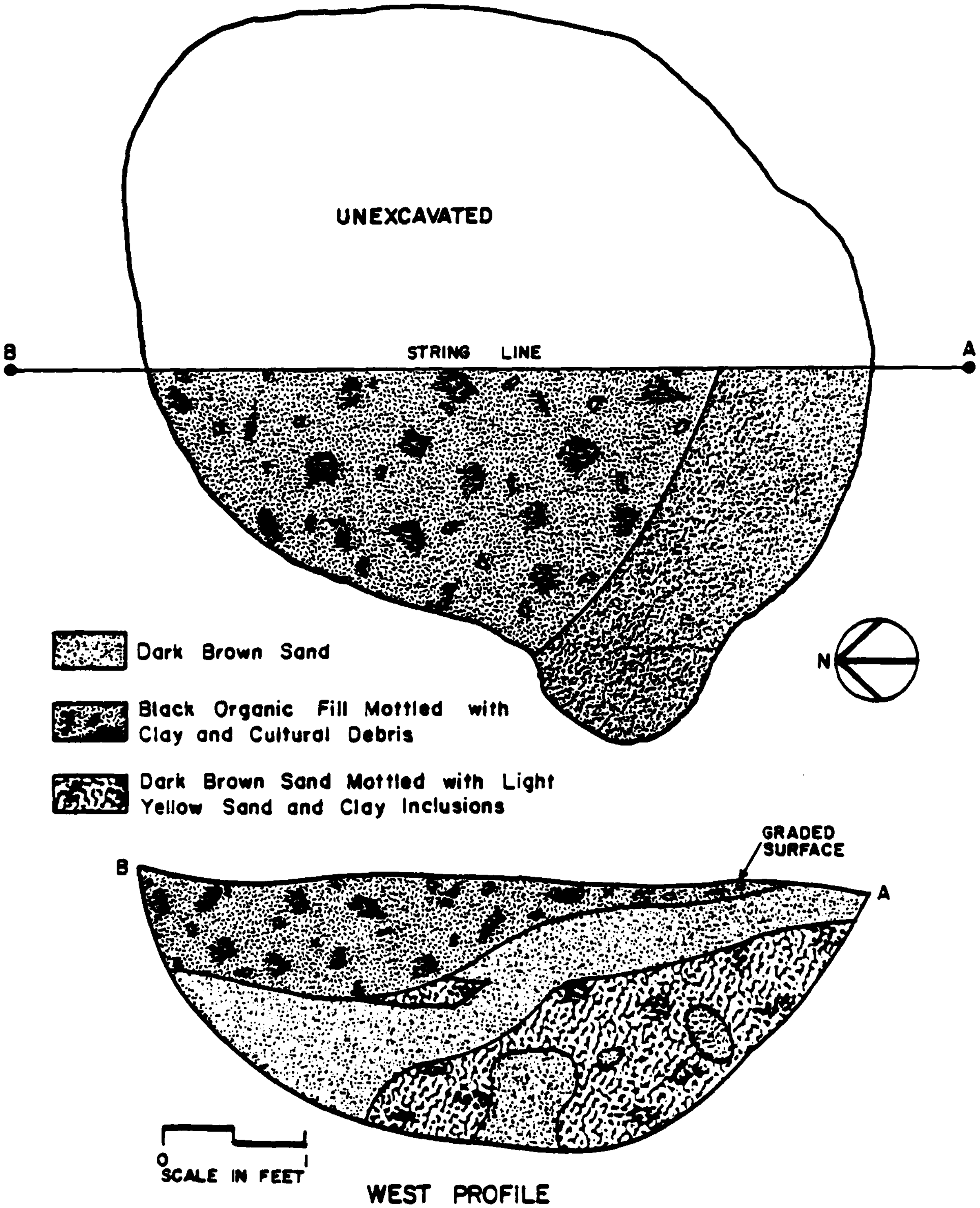


FIGURE 63
Site 38BK245
Feature F63
Plan and Profile

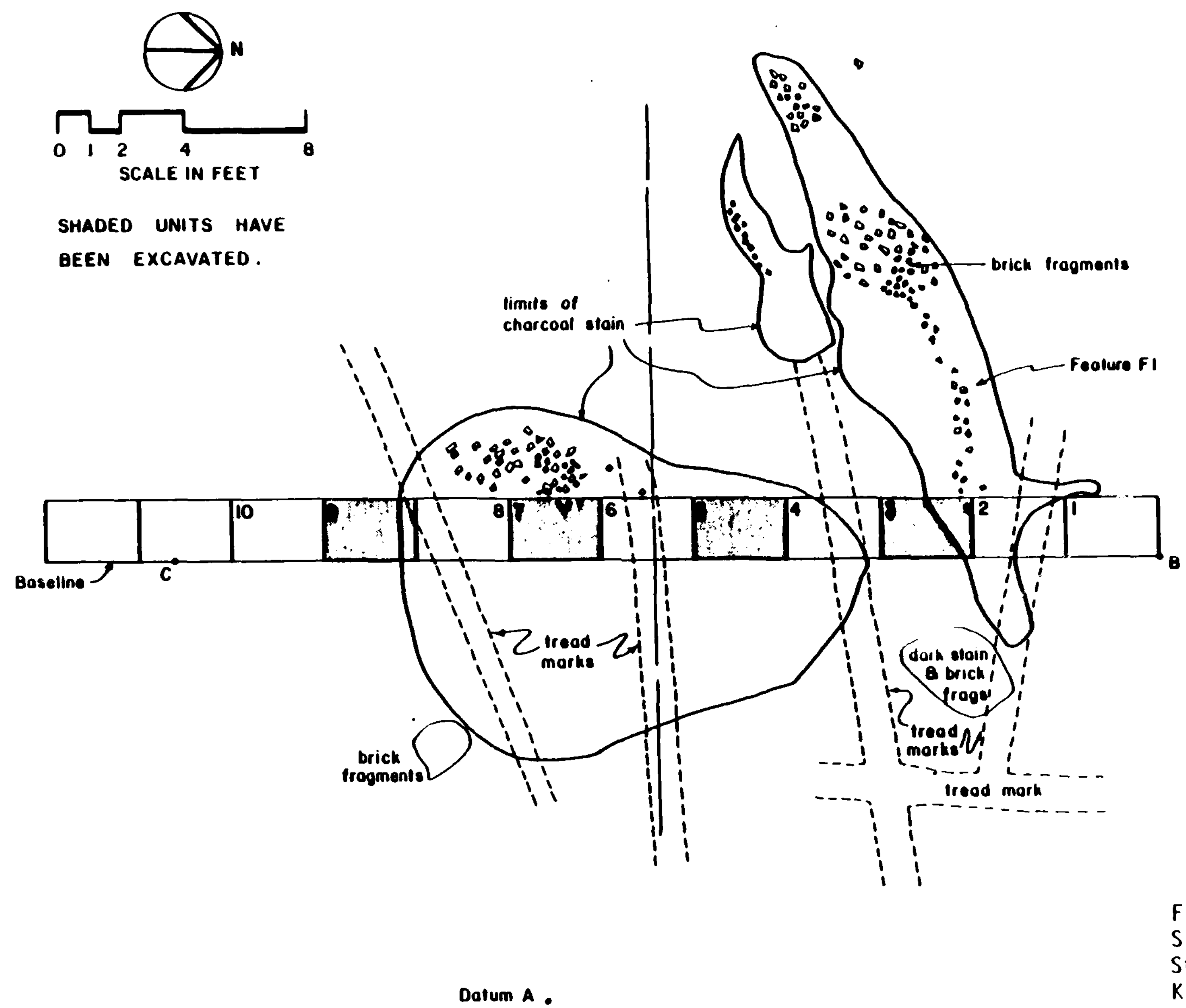


FIGURE 64
Site 38BK245
Structure 245K
Kiln-Plan View

nature of such features, only a charcoal stain and scattered, broken brick remained to be excavated.

The area was trenched from north to south to provide a profile of the deepest part of the presumed intact portion of the clamp. The remaining area was divided into quadrants and excavated. Three charcoal concentrations with associated brick concentrations were delineated. Several isolated brick concentrations were probably the result of the tractor disturbance. Feature 245KF1 (Figure 64) was a trough or ditch with a thick concentration of charcoal and brick. Its irregular depth and width precluded it from being a functional part of the clamp. No in-situ bricks from the clamp which might have provided insight into its size or form were found.

The primary result of the clamp excavation was the development of the artifact pattern presented in Table 18 (high architecture and activities percentages and an overall low artifact count) and a large quantity of brick fragments which could be used for comparative data at Structure 245C, the brick piered structure. All brick fragments with at least two measureable dimensions were returned to the lab for measurement. One of these had an "S-..." (Samuel Cordes?) written on it with a finger while the clay was still soft. Brick measurements and comparative data from Structure 245C are discussed below in detail.

Structure 245C, located north of the borrow pit and the other structures and features already discussed, was excavated in 10 foot by 10 foot squares (Figure 65). Brick rubble was cleared and a large sample of complete bricks from the rubble were boxed and returned to the lab for measurements. The first layer of soil was mixed with rubble, dark leaf mold, shell from the tabby mortar, and topsoil. Below this, the soil was a mixture of brown topsoil with small amounts of shell and occasionally brick rubble. This layer rested on red clay subsoil (Figure 66). Structure 245C actually included two structures, $245C_1$ and $245C_2$. Structure $245C_1$ is discussed first.

To the northeast of the chimney (Figures 65 and 67), the original ground surface dropped dramatically to 4.0 feet below ground surface (Figures 66 and 68). The base of the chimney rested on red clay at this level. The red clay extended further to the northeast from the chimney base and continued down to 3.2 feet before meeting the east wall of the excavated block. This fill northeast of the chimney consisted of several layers, and all but the top .8 foot was laid down soon after construction of the chimney base. The lowest level was an ash lens. This was covered with mottled red and gray clay which contained construction artifacts. The next layer did not extend far from the chimney, where it was thickest, and feathered out approximately three feet from the chimney. This layer was a mixture of sand and gray clay. A gray sand mortar and brick rubble lens was superimposed on the sand and gray clay, which possibly dated from construction of the chimney. All of these layers were then covered by a mottled red clay and tan sand layer with few artifacts and later by topsoil and brick rubble.

Outside of the excavation block and yet again further to the northeast, there was a slight depression in the natural surface running southeast to

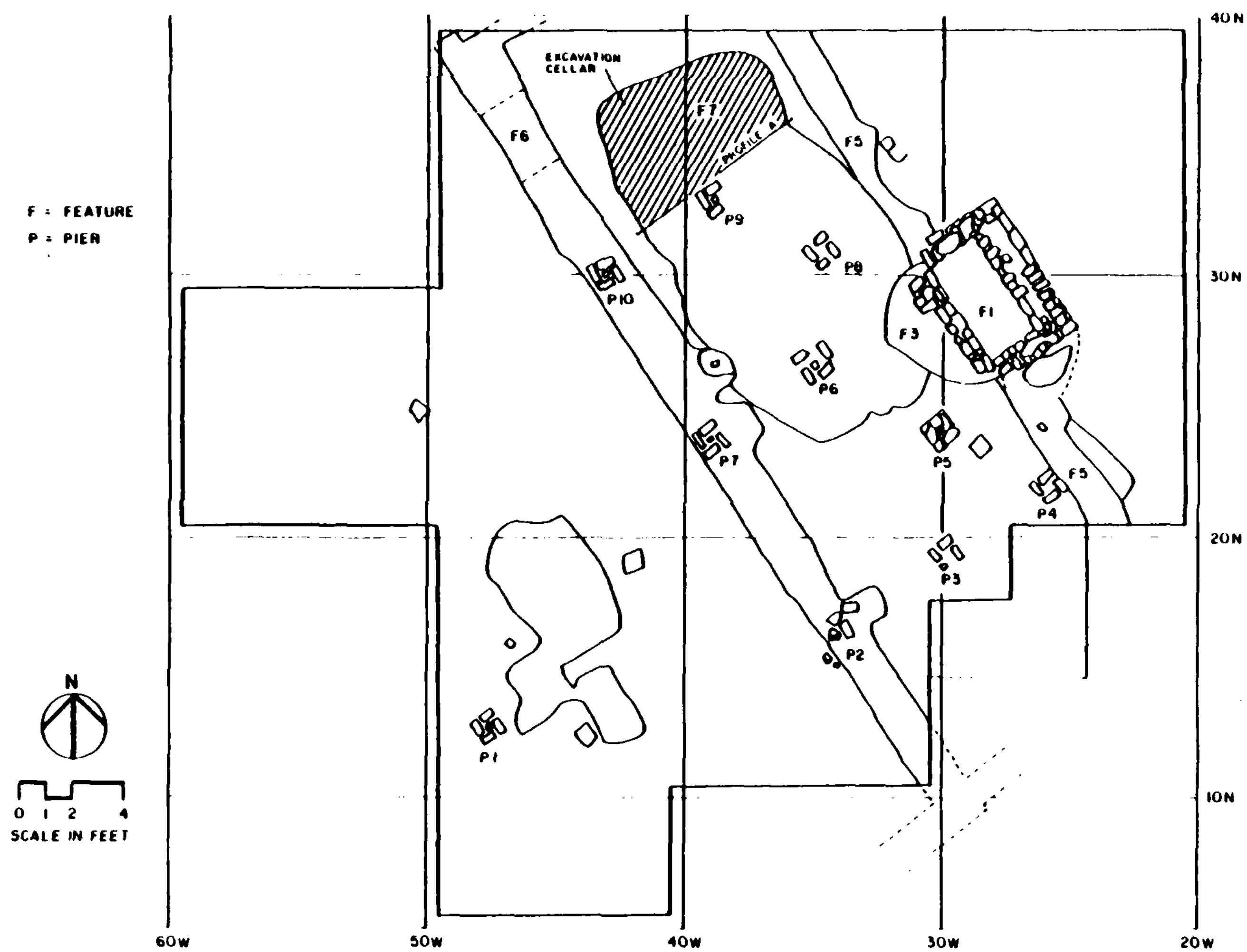


FIGURE 65
Site 38BK245
Structure 245C
Block Excavation

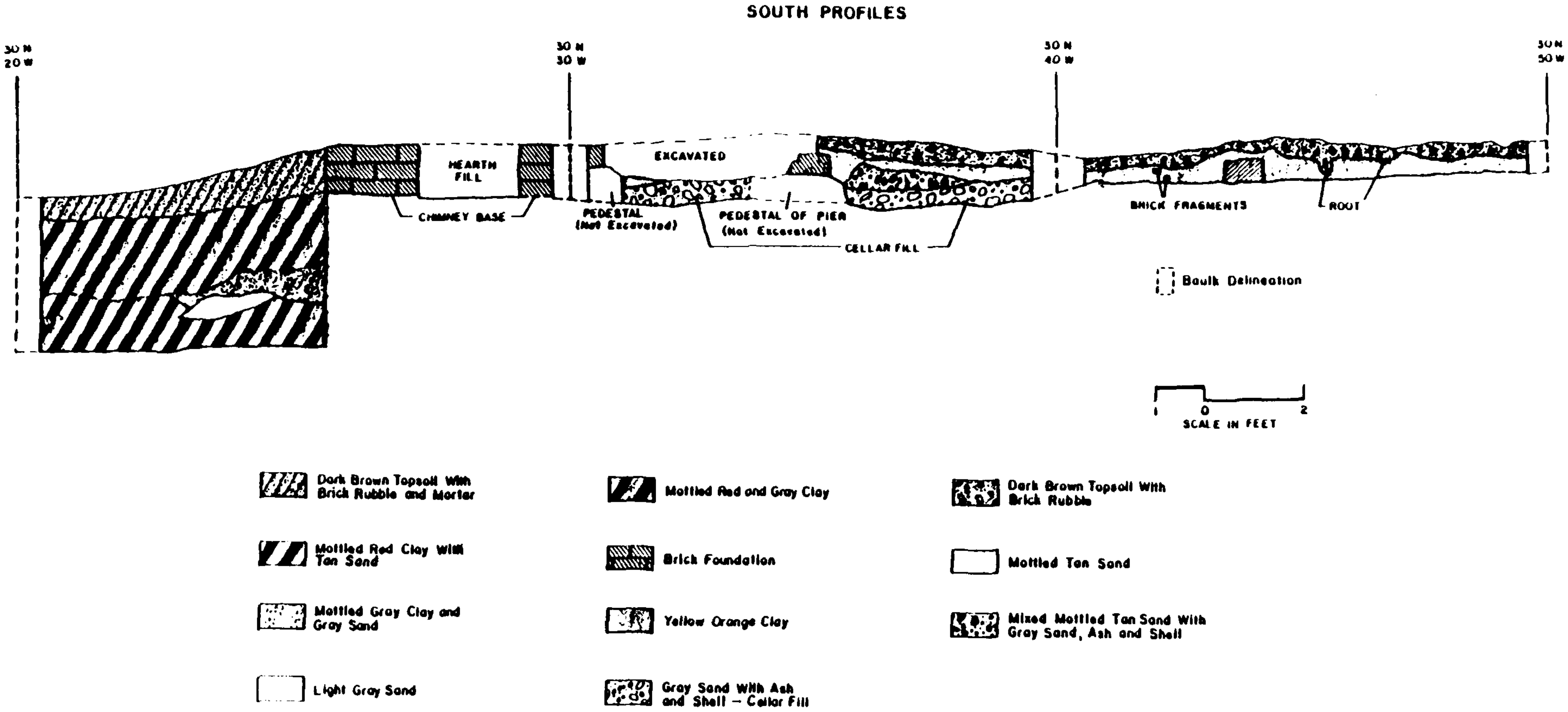


FIGURE 66
Site 38BK245
Structure 245C
Block Excavation
Profile

STRUCTURE 245 C
LOOKING SOUTHEAST

CHIMNEY AT STRUCTURE 245 C
LOOKING SOUTHWEST

FIGURE 67
Photos of
Structure 245C
and Chimney

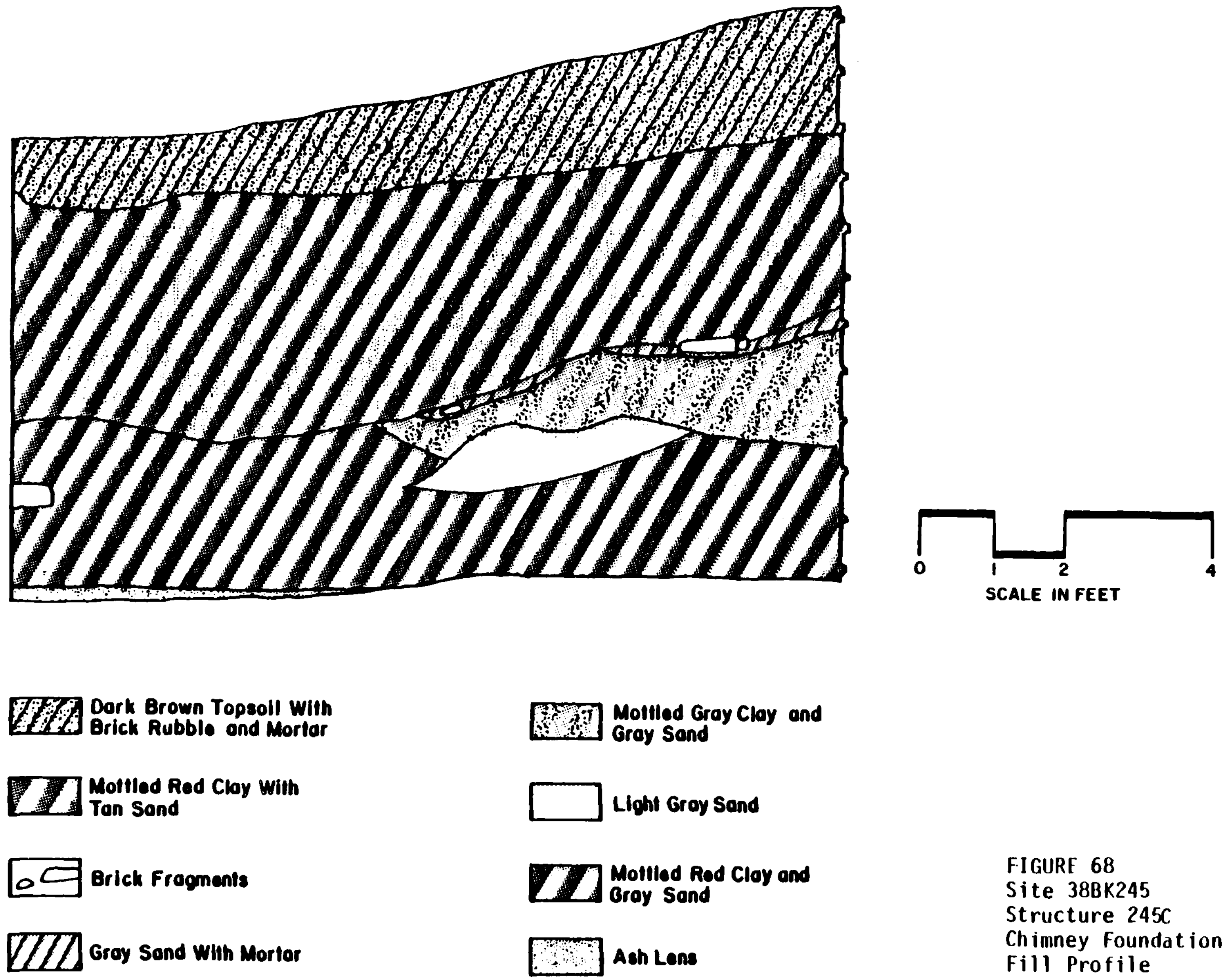


FIGURE 68
Site 38BK245
Structure 245C
Chimney Foundation
Fill Profile

northwest; this may have reflected the originally lower ground level on that side of the building before the soil layers above were put into place. Since the ground may have originally sloped down and away from the structure on the northeast, only minor excavation of the existing slope was required to provide for the chimney foundation. A gray ashy hearth pad was evident to the southwest of the chimney, and remains of the hearth could be seen on the side of the chimney facing the hearth pad (Figure 65). The hearth pad was .15 to .20 foot thick next to the chimney and feathered out from there.

Of the 22 seeds recovered from the fire box, two were rice and two maize. Only Feature F15 at Site 38BK76 had more rice. This was also the only feature at Structure 245C to have faunal remains, other than bivalve shell. There was .02 gram of land snail and .64 gram of opossum. However, these could have been deposited as naturally occurring specimens in the fill dirt.

The building itself (Figure 67) was built upon at least nine and probably ten brick piers (the north corner is missing). The piers were constructed of four bricks per course and held together with tabbylike mortar. Piers P3, P5, P6, P8, and P10 (Figure 65) had evidence of two courses of brick, and all of the piers may have been higher originally. The condition of the top layers of the hearth precluded estimating floor height (Figure 67). It was evident from the central supports (Piers P5, P6, and P8) that the structure had an elevated wood floor.

An attempt to locate walls which contained windows failed. A total of only 52 window glass fragments were recovered. Twenty-three of them were found in units either completely or more than halfway under the house. The heaviest concentration was at the interior northern corner of the structure, which possibly indicated a window on the northwest or northeast wall between the corner and the chimney. It is possible that undamaged window panes were salvaged and removed from the site or that the structure had few glazed windows.

Structure $245C_2$ was directly below Structure $245C_1$. In fact, the piers of Structure $245C_1$ rested on and were aligned with the trenches of Structure $245C_2$. Even though it was possible to obtain the width of the trench structure, its length extended beyond the limits of the block. On the last day of fieldwork, an attempt was made to define the limits of the southwest trench with unstructured excavations. The dotted lines on Figure 66 represent the results of this work and give the best estimate of the remainder of the structure. The southern end of the southwest trench showed a "T" intersection which would indicate a building much larger and more complex than the other relatively simple trench structures.

The key to the function of Structure $245C_2$ was the cellar associated with it. The cellar was clearly associated with the trench structure ($245C_2$), rather than with the brick piered structure ($245C_1$). This was made clear by the discovery that the cellar was confined within the trenches, three brick piers were built on the cellar fill, and the hearth pad associated with the chimney base of 245C also extended onto the cellar fill.

The cellar (Figures 65 and 69) was sectioned and the northeast end was excavated to the cellar floor. The top layer of fill was gray sand with large quantities of tabby mortar and shell fragments. The consistency of this layer and its unusual nature seemed to indicate that it was intentionally placed to level the cellar at ground level. Below this, and entirely across the cellar, was a thick layer of mottled gray clay. A thick layer of water-laid sand was wedged between the gray sand and mottled gray clay layers on the western side of the cellar. This indicated that the mottled gray clay was in place and left open to the elements for a considerable length of time. Below the gray clay was a layer of mottled reddish-orange clay. The presence of the gray clay overlain on the reddish orange clay was apparently a reversal of the normal subsoil stratigraphy. Both soil types did not occur adjacent to the cellar and must have been imported. The cellar had collected water so that everything below the orange clay layer was almost permanently under water. Below the reddish orange clay in the center of the cellar was a layer of organic clay. Chunks of poorly preserved pine boards, which were thought to be flooring were encapsulated in the organic clay. Immediately below the organic clay was a layer of hardened pine tar. The pine tar rested directly on the red clay floor on the western side of the cellar and on orange sand mixed with the red clay subsoil on the eastern side of the cellar. The pine tar had obviously built up over a long period. Pressed into it were the forms of palmetto and other unidentifiable leaves, which had slowly been covered and preserved by dripping pine tar from above.

Understandably, carbon was exceptionally high in the organic clay layer. The lack of bone (and the presence of wood), the very low overall frequency of artifacts, the low percentage of Kitchen Group artifacts (all colono sherds), the high percentage of Architecture Group artifacts (all nails), and the pine tar layer resting on the floor indicated a special use function for the cellar. The function of the cellar and trench structure associated with it was probably the processing and storage of naval stores. The odor given off by the pine tar was distinctly reminiscent of old wooden ships, which may indeed have been the final destination of the tar stored or processed in the structure above. Such tar was used in caulking and preparing rigging on sailing ships, and documents indicated that Samuel Cordes had been involved in the production of naval stores.

Summary of 38BK245

The mechanically stripped area of 38BK245 produced evidence of eight structures; these were 245A, 245B, 245D, 245E, 245F, 245G, and 245H and a possible structure northeast of 245B. Two were large double bayed structures and one was a barn. One cellar was excavated, but it and the structure above it had been severely damaged. Associated with these structures were trash pits, postholes, and sets of irrigation trenches aligned from the southwest to the northeast. To the north of the stripped area was a severely damaged brick clamp (245K), and to the north of the brick clamp were the remains of a chimney fall. Hand excavation of the chimney fall produced a chimney base and a brick piered structure ($245C_1$) overlying a trench structure ($245C_2$). Associated with the trench structure was a second cellar. The brick piered structure served a non-domestic, probably administrative, function on the plantation. The trench structure and cellar were associated with naval stores production.

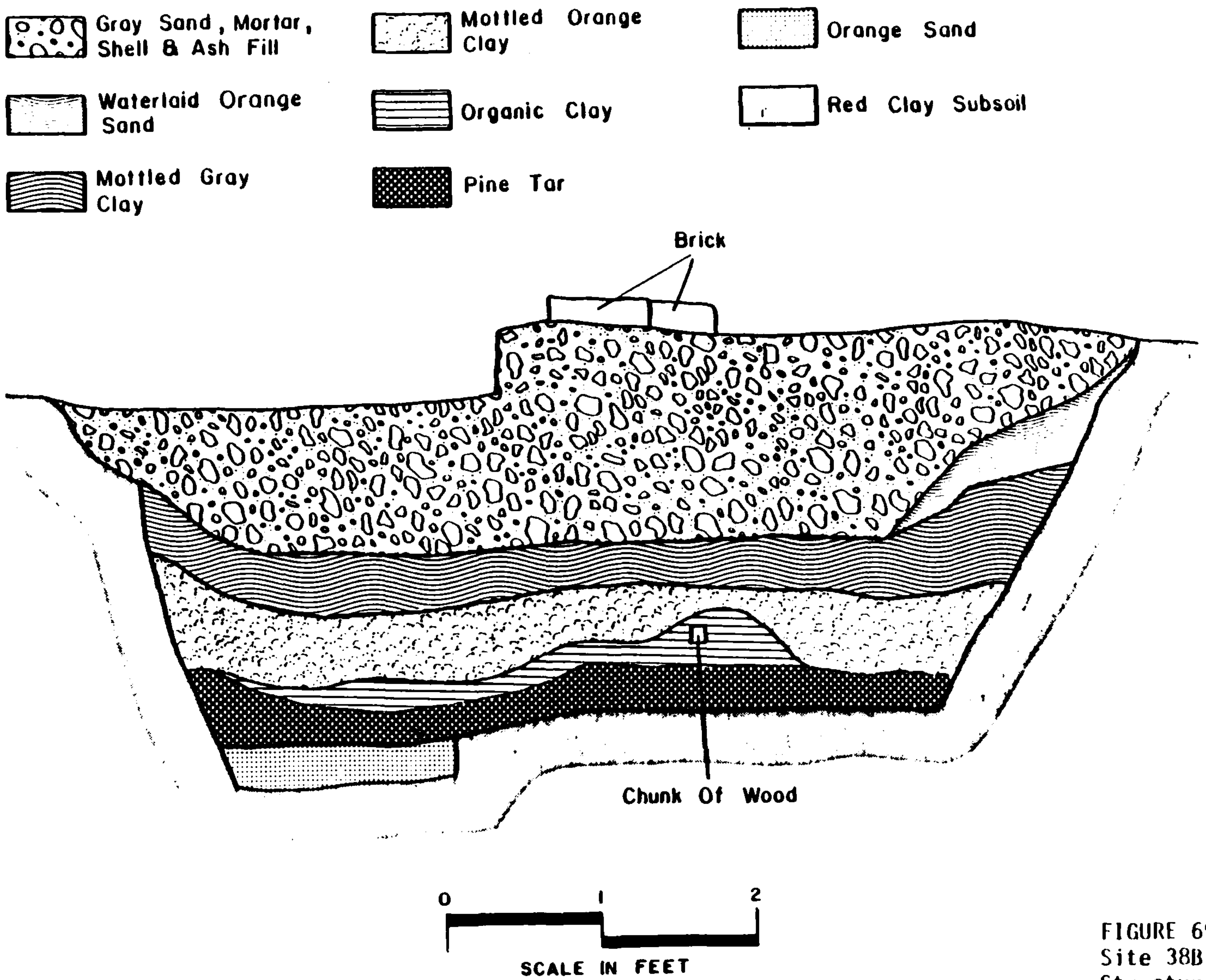


FIGURE 69
Site 38BK245
Structure 245C,
Cellar Profile

Slave Architecture

The preceding sections have briefly described 29 structures and 58 associated features. Hundreds of features, including postholes and trenches, were mapped and recorded during the project. The structures and features alone could be analyzed from a variety of viewpoints, and hopefully will be in the future. The controlling hypotheses of this project have determined our approach to the synthesis of the structural data. Summarized, our hypotheses concerning the structures were: (1) that the earliest foundation form at Yaughan Plantation (38BK75 and 38BK76) was trench construction, which wa later superceded by posthole construction; (2) this sequence represented acculturation of the slave population; and (3) at Curriboo Plantation (38BK245) trenches were earliest, followed by postholes, and that both were superceded by brick pier construction for major plantation outbuildings. Our conclusions are presented here.

The two primary superstructures were, in our opinion, frame and mud wall (see Appendix D). Each to a certain extent determined roof type and the presence or absence of architectural accessories such as windows and fireplaces. Wattle and daub was considered as a superstructure, but was rejected. Wattle and daub implied vertical posts with saplings or brush woven between them, covered with mud. If a trench was dug to place the posts, the wattle extended into the trench to provide a seal around the bottom of the wall. If such a seal was not wanted, postholes would suffice. At Yaughan and Curriboo, none of the trench structures showed evidence of wattle; furthermore, some of the postholes on posthole structures were too widely set for wattle to be woven effectively. Our conclusion is, therefore, that neither foundation type represented wattle and daub superstructures.

The requirements for mud wall architecture were adequately met by trench construction. The trenches were not simply backfilled with unmodified topsoil but were filled with clay which occasionally showed evidence of being mixed with water before application. Trenches would preclude, to a certain extent, undercutting of a mud wall and provide support of lateral thrust as discussed in Appendix D. A stone foundation would do the same, much like adobe structures in Mexico (personal observation 1972-1976), but building stone was in short supply in the Coastal Plain. The foot wide or often wider wall bases would be necessary to support a heavy, probably tapering wall, above. The rather closely set posts would give added strength to such a wall, much like rebars in concrete. Further, trench foundations were found at St. Genevieve, Missouri (Fairhurst 1974), Fort Michilimackinac (Marlesa Gray personal communication 1979 and Stone 1974), and the Gulf Coast (Wilson 1979), where the superstructures were hypothesized to be open beam with other materials such as brick or plaster filling the interstices. At the Cooper River sites, the space between posts was clearly not filled with brick or plaster, but rather clay mixed with water to a mortarlike consistency. Evidence for such a mud wall technique or a similar technique, rammed-earth architecture, is common throughout Africa (Guidoni 1978; and Wheaton personal observation 1966-1969), the presumed origin for some if not all of the inhabitants and probable builders of the structures at Curriboo and Yaughan.

If it can be assumed that the trench structures were mostly representative of mud wall construction, then the roofs were probably of thatch tied to roof supports, which were in turn attached to the tops of the posts protruding from the walls. Normally in this type of architecture the roof line extended well beyond the wall to protect it from rainfall and provide shade; this resulted in a drip line well beyond the wall. Soil disturbance by agriculture and stripping at 38BK75 and 38BK245 and root and other natural disturbances at 38BK76 prevented identification of any drip lines.

With such mud wall and thatch roof structures, one should also expect to find evidence of a rather high burn down rate even if wattle and daub chimneys were used. The absence of chimneys on the domestic structures or of any evidence that the structures burned down makes the probability of interior hearths remote, since one would expect at least one thatched roof to catch fire. Two obvious conclusions can be drawn in such a situation: some kind of exterior hearths were used, or all cooking was centralized and not located during fieldwork. Unfortunately, the evidence for permanent outside hearths was slight. Only one permanent hearth was found at Site 38BK75, located outside of a posthole structure (Feature F25). At Site 38BK76, on the other hand, shallow depressions filled with soil and ash may have been temporary hearths (Features F33 and F82). Due to ground disturbance from cultivation, root and small animal action, and destruction from heavy equipment at 38BK245 before mitigation, it was impossible to establish the presence of temporary hearths at that site without excavating outside the limits of the project area. Negative evidence against centralized cooking, at least at Site 38BK76 where virtually all structures were exposed, tended to indicate that it was likely temporary exterior hearths, possibly only a few stones to set a pot on, were the primary source of cooking fires at the slave quarters. Along these same lines, it is interesting to note that modern pottery firing of the Yoruba in Nigeria involves simply piling pots and lightweight fuel together on the surface of the ground. Perhaps all fire locations at the slave quarters for cooking and pottery firing were temporary in nature.

In order to test the significance of this apparent difference in mean distances, an F test was conducted. Although an F test is normally used to test variance it can also be used to compare means (Downey and Heath 1974:211). The F score was then converted to a t score using the formula $t = F$ (Downey and Heath 1974:215). The formula used was the following:

$$F \text{ score} = \frac{\text{mean-square between groups}}{\text{mean-square within groups}}$$

where:

$$\text{mean-square} = \frac{\text{sum of squares}}{\text{degrees of freedom}}$$

$$\text{between sum of squares} = \sum x_b^2 = \sum \frac{(\sum X)^2}{n} - \frac{(\sum X_T)^2}{N}$$

$$\text{within sum of squares} = \sum x_w^2 = \sum x_t^2 - \sum x_b^2$$

$$\text{total sum of squares} = \sum x_t^2 = \sum X^2 - \frac{(\sum X)^2}{N}$$

The data developed utilizing this method for all trench and posthole structures at all sites is presented in Table 20.

TABLE 20. Postmold Distance Data
All Trench and Posthole Structures

	Trenches	Postholes
Sum	= 259.80	= 322.80
Mean Distance	= 2.2205	= 4.2474
Sum-of-Squares	= 615.20	= 1478.92
Number of cases	= 117	= 76

Between sum-of-squares = 189.2725

Within sum-of-squares = 146.1804

Total sum-of-squares = 335.4529

	df	sum-of-squares	mean-square
Between groups	1	189.2725	189.2725
Within groups	191	146.1804	.7653

$F = \frac{189.2725}{.7653} = 247.3044$

$t =$ F = 15.7259
t = 12.706 at 1 degree of freedom at .05 level of probability

With this data it can be stated that the apparent difference in mean distances is probably a true difference. Whether or not this was a consequence of different superstructures, or whether it reflects adaptation over time to the difficulty of digging long trenches into the hard red clay subsoil, cannot be decided by statistics. However, based on the other data presented above, it is felt that mudwalled and frame structures are the best explanation.

Time, at least superficially, correlates with trench and posthole structures and, therefore, their post distances. Site 38BK75, the most recent site, had three posthole structures and only one trench structure. Site 38BK76 had nine trench structures and five posthole structures. The stripped area at 38BK245, the earliest site, had five trench structures and one or possibly two posthole structures. Further corroboration of the relative ages of the two kinds of structures and, hence, posthole distance was provided by the placement of posthole structures on top of trench Structures $75B_2$, $76B_1$, and $76D_1$.

In order to check whether there is a difference between post distances within trench and posthole structures from site to site which would imply idiosyncratic differences probably not related to superstructure construction, comparisons were tested between trenches at 38BK76 and 38BK245 and between postholes at 38BK75, 38BK76, and 38BK245.

The mean distances between posts in trenches at 38BK76 and 38BK245 were 2.1327 feet and 2.2889 feet, respectively. This difference is small and is not statistically significant. The mean distance between posts in postholes at 38BK75, 38BK76, and 38BK245 are 3.9323 feet, 4.1974 feet, and 6.2000 feet, respectively. Here there is obviously a greater variability than for trenches. These differences probably are not statistically significant due to small sample size, but since the distance at 38BK245 was almost double that at 38BK75, something does seem to be occurring at the posthole structures which does not appear in the trench structures. This variability may be due to the availability of building materials (e.g. longer beams which could span larger distances, available to the builders at 38BK245, perhaps), or to differences in the function and, therefore, construction of posthole structures. A wider spacing might be presumed for open-sided thatch roofed sheds or work areas as opposed to enclosed frame cabins. In any case, there was roughly three times as much variability in post distance in posthole structures than in trench structures as illustrated by their variances, 1.4383 for posthole structures and .3303 for trenches.

Orientation of the structures may also provide a clue to differences in function and date of construction within the sites. There were obviously differences between the orientation of structures such as 76L and 76J which were different from the other structures at 38BK76, or the structures at 38BK245, which were different from those at 38BK75 and 38BK76. Such differences are probably due to topographic conditions or the owner's personal tastes. It is unfortunate that so few of these structures were hand excavated to provide data on function. Beneath this readily identifiable difference in orientation was a deeper pattern of orientation, which permitted certain structures to be offset at approximately 90°, but apparently within certain allowable

limits of variation. This seemed to hold true at sites 38BK76 and 38BK245. This offset might be likened to the buildings around a plaza where half the buildings are offset within a few degrees of 90° from each other, but the overall plan prohibits structures at 25°, 30°, or 45°. This deeper or more basic plan at the two sites can be examined by adding 90° to the lesser angles in order to "normalize" them for comparative analysis of the limits of allowable variation in the underlying plan. The converted structures were 76J, 76L and all structures except 245C at 38BK245. Since structures at Sites 38BK76 and 38BK245 were either approximately parallel or approximately perpendicular to each other, the intent was to show that the same underlying plan was evident at each site. In order to compare the underlying plans within the sites, the data for Figure 70 was calculated.

Figure 70 shows a graph of all structures; those which were offset 90° from the other structures have been converted to similar readings by adding 90°. As the figure illustrates, orientation falls into distinct groupings, 38BK75 being the tightest at 128° and 38BK76 being the most variable. Indeed, 38BK76 has two groups of orientation, one ranging from ±119°-±123° and a second from ±134° to ±145°. Site 38BK245 ranges from ±143° to ±147°.

T-tests were run on the data to determine if the observed differences were statistically significant. The structures oriented from 134° to 145° at Site 38BK76 were compared to those at 38BK245 and not found to be significantly different from each other. However, when the structures oriented from 119° to 123° were compared with the others at 38BK245, the result was a t-score of 25.3872 with one degree of freedom. This is significant at the .001 level. It is not surprising, therefore, that the two groups at 38BK76 are also significantly different from each other at the .001 level. The structures oriented from 119° to 123° at 38BK76, however, were not statistically different from those at 38BK75, which all measured 128°, although this may be the result of small sample size in the later group.

The differences noted in the structures at 38BK76 were formally compared to determine whether there may have been two groups or building episodes at the site. Structures 76C, 76D, 76E, 76F, and 76M (Figure 26) on the west end of the site were included in Group A. Structures 76A, 76B, 76G, 76I, 76J, 76K, and 76L on the east end of the site were included in Group B. The mean orientation of Group A was 121.5° and that of Group B was 139.6°. This difference proved to be significant at the .001 level, meaning that the average orientation of the buildings probably represented two different populations of building orientation. This can be interpreted to mean that the buildings were probably built by two different groups of people at two different times. Mean ceramic dates developed from excavated and surface materials in the vicinity of the structures are presented in Table 21.

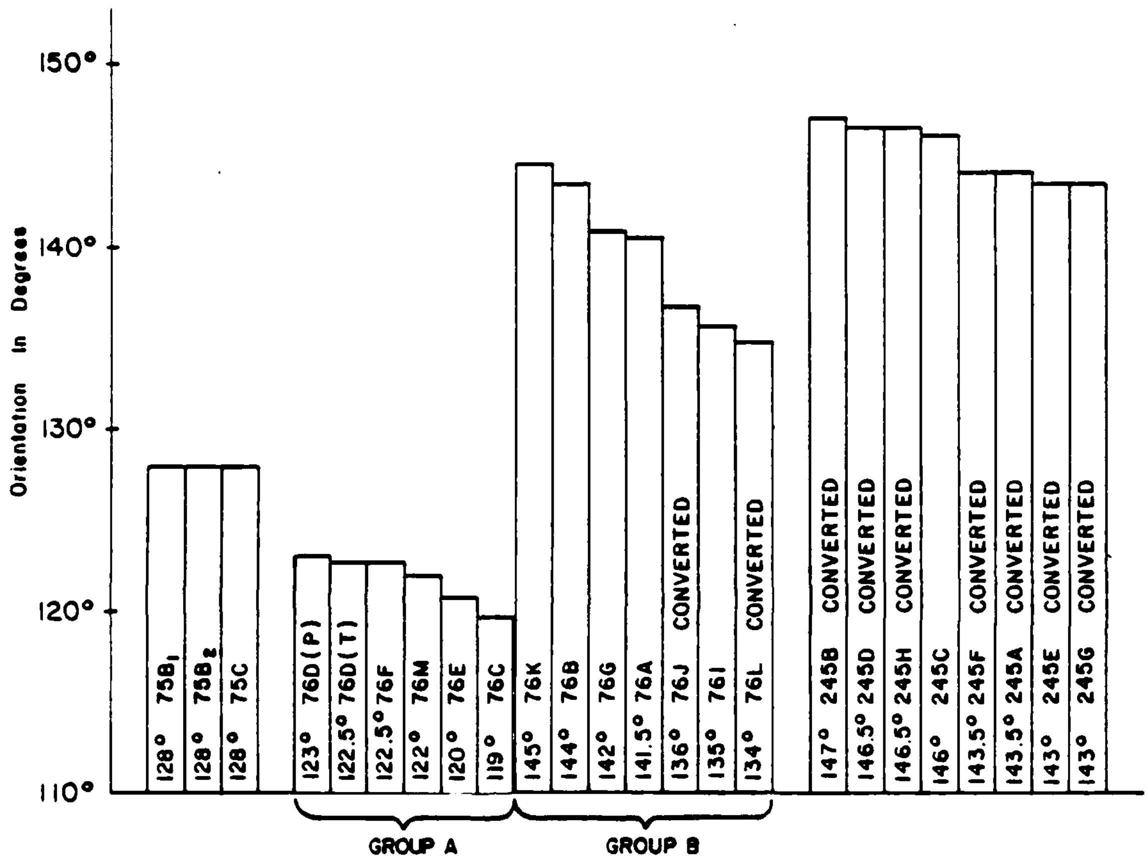


FIGURE 70
House Orientation at
Yaughan and Curriboo
Plantations

TABLE 21
38BK76 Structure Groups A and B
Mean Ceramic Dates

Group A		Group B	
76C	1770.6	76A	1773.4
76D	1770.6	76B	1787.6
76M	1770.6	76G	1793.8
76E	1765.1	76K	1769.3
76F	1731.0	76L	1769.3
		76I	1793.8
		76J	1767.3
Mean	1761.6		1775.7
Range 1731.0 - 1770.6		Range 1767.3 - 1793.8	

Although the dates in Table 21 are often based on very few sherds or on surface material which may have been moved within the area covered by a group, there is clearly a trend for Group B to be later than Group A. These data on orientation would indicate that two building episodes were represented at the site and that Group A was built before Group B.

Data were examined to determine if post distance increased with time as has been hypothesized. The mean distance of Group A was 3.41 feet and for Group B it was 2.70. Although a difference in distances was noted, it was not significant. Moreover, the means ran counter to the hypothesis that post distance increased over time, and it was felt that something other than time was affecting the post distances at 38BK76. This difference may reflect a difference in function. The eastern and later structures were, for the most part, slave cabins, and the western and earlier structures were an overseer's cabin (perhaps the first "main" house) and specialized storage or activity structures requiring different architecture.

Inspection of the floor plans of Structures 76D and 76M showed them to be unlike any other structures at 38BK76. Structure 76D was built in two parts. The first part was a trench structure with a central line of postholes indicating floor supports or a poorly aligned interior wall, and the second was a posthole addition continuing the structure to the west. Assuming, as has been assumed for all trench structures, that entrance to trench structures was gained through the narrow ends of the structures where there was no trench, then the floor plan of 76D was that of a shotgun house. Structure 76M was aligned with Structure 76D, and the main portion of Structure 76M was the same width as Structure 76D. The houses were closely enough spaced so that they could conceivably have been connected. In any case, the size, orientation, and proximity of structures 76D and 76M indicated that they were probably associated, which resulted in a rather tight complex of structures. One of the other structures in Group A was also very different in floor plan from the other structures at 38BK76. This was Structure 76E, which had a

crude dividing wall trench across the center, a series of postholes parallel to the central trench, and a partial end trench. The floor plan resembled a crude copy of the early two bay structures at 38BK245.

The artifacts in probable trash features associated with Group A structures also varied from those in the remainder of the site (Table 22). Specifically, those features included F1, F2, F4, F5, F7, F8, F10, and F11. Trash features associated with Group B structures were F12, F13, F14, F33, and F82. The sheer number of trash pits in Group A may have indicated that it was inhabited earlier and longer than Group B. Using South's (1977a) artifact pattern model, the Group A and Group B features are shown in Table 22:

TABLE 22
Site 38BK76 Structure Groups A and B
Artifact Patterns of Associated Features

	Group A		Group B	
	#	%	#	%
Kitchen	1350	81.08	260	89.35
Architecture	258	15.50	24	8.25
Furniture	2	.12	0	-
Arms	0	-	0	-
Clothing	8	.48	0	-
Personal	0	-	1	.34
Tobacco Pipes	44	2.64	5	1.72
Activities	3	.18	1	.34
	1665		291	

Three things should be noted from this data. First, the amount of artifacts was over five and one half times larger in Group A than Group B, although the number of features was less than two times higher. Second, the percentage of kitchen artifacts was higher and the percentage of architecture artifacts was lower in Group B than Group A. Third, only Group A had furniture and clothing artifacts, although their percentages were very low.

More importantly, the Kitchen Group artifacts (Table 23) were separated into colonoware, nonlocal ceramics, wine bottle glass, and other kitchen artifacts. No tableware was recovered from the features in either group and only one iron kettle fragment was found in F8, Group A. The remainder of the artifacts consisted of various pieces of non-olive green bottle glass.

TABLE 23
Site 38BK76 Structure Groups A and B
Kitchen Artifacts of Associated Features

	Group A #	Group A %	Group B #	Group B %
Colono	1096	81.25	242	93.08
Non-local Ceramics	39	2.89	9	3.46
Wine Bottles	89	6.60	8	3.08
Other	126	9.34	1	.38
Total	1350		260	

Table 23 indicates that there was relatively more Colono in the Group B features than in the Group A features, nonlocal ceramics were about the same, wine bottles were twice as frequent in Group A, and Group A had an overwhelming amount of other bottle glass. A chi-square test was run comparing these frequencies and the overall pattern was significantly different at the .001 level.

Since the greatest percentage differences were for olive green glass and other kitchen artifacts, mostly other bottle glass, it was decided to lump these two categories together to compare them with 38BK75, Spiers Landing and South's (1977a) Carolina Artifact Pattern (CAP) in hopes of showing their affinity to an Anglo-American pattern. Since South's artifact patterns include very little Colono, it was also necessary to collapse the Colono and nonlocal ceramics categories in order to make a comparison. For comparative purposes, only trash features were used at 38BK75 and 38BK76 and Spiers Landing. The Revised CAP data included all material from Brunswick S7, S10, and S25. The reasons for exclusion of the other sites in South's original pattern are given elsewhere in this report. The results are presented in Table 24.

TABLE 24
38BK76 Structure Groups and Various Sites
Ceramics and Glassware of Associated Features

	38BK76 Group A #	38BK76 Group A %	38BK76 Group B #	38BK76 Group B %	38BK75 75B #	38BK75 75B %
All Ceramics	1135	84.14	251	96.54	936	94.35
All Glassware	214	15.86	9	3.46	56	5.34

	Revised CAP #	Revised CAP %	Spiers Landing #	Spiers Landing %
All Ceramics	23670	71.81	913	88.47
All Glassware	9290	28.19	119	11.53

It should be noted that although all of the sites varied considerably from the CAP, the pattern at 38BK76 Group A was more similar to the CAP than that of any of the other sites. Chi-square tests were used to establish whether the differences were significant.

TABLE 25. Chi-square Values
Comparing Ceramics and Glassware

Sites	Chi-square Value	Significant Difference
38BK76 Group B vs. 38BK75	1.9956	none
38BK76 Group A vs. 38BK76 Group B	28.0841	at .001 level
38BK76 Group A vs. Spiers Landing	9.1237	at .05 level
38BK76 Group B vs. Spiers Landing	15.1510	at .001 level
38BK76 Group A vs. South's *Revised CAP*	98.2493	at .001 level

d.f. = 1 p = .10 at 2.706 p = .05 at 3.841 and .001 at 10.827

The significance of the differences in relative frequencies of Kitchen Group artifacts was supported by the chi-square values. It was therefore concluded that 38BK76 Group A had significantly more glassware than 38BK76 Group B, 38BK75, and Spiers Landing, and significantly less than the Revised CAP. While this did not establish that Group A and the CAP were similar, it did imply that Group A was somewhere between the slave occupations and the CAP. This can be explained if it is understood that glassware was essentially a luxury item and was curated as such during the eighteenth and early nineteenth centuries. As a luxury item, glassware would not have been as easily available to slaves as it would have been for overseers and owners. If the structures in 38BK76 Group A were used primarily by an overseer or owner, then one would expect more glassware there than at 38BK76 Group B, 38BK75, or Spiers Landing. As glass became more readily available in the nineteenth century, one should expect to find relatively more at later slave sites than earlier sites. This may be the reason for the higher level of glass at Spiers Landing than at 38BK76 Group B and 38BK75.

The difference between 38BK76 Group A and the Revised CAP should not have been as great as it was, if the structures at 38BK76 Group A were inhabited solely by an overseer or owner. Based on the vast amount of Colono and documentary evidence, it is likely that 38BK76 Group A was not inhabited solely by an overseer or owner during its entire occupation. It can be hypothesized that only Structures 76D and 76M may have been inhabited by an overseer or owner at the same time as Structures 76C, 76E, and 76F were used by slaves and for other functions. Documentary evidence and mean ceramic dates point to a building date in the 1780s for the quarters at 38BK75 and the owner's house west of 38BK75. If this was indeed the case, it is likely that structures 76D and 76M may have been occupied by slaves from the 1780s onward. Both the fact that not all of the structures at 38BK76 Group A were ever inhabited by the overseer or owner and that structures 76D and 76M may have been occupied by slaves for the latter part of their existence would naturally obscure a CAP type of pattern. There was also a suggestion from documentary evidence that the first years of the plantation may have involved the part-time employment of an overseer at Yaughan. Such part-time occupation could easily be partially masked by later slave occupation.

Before continuing with a discussion of structure size and shape, the data on foundation type, posthole distance, and orientation should be summarized and related to the original hypotheses. It was evident from the general trend of foundation types that trench foundations were generally earlier than posthole foundations at 38BK75 and 38BK76. This was further supported by postholes intrusive into trench structures. Post distance was wider in posthole houses and this, coupled with other data, led to a conclusion that the superstructures at the sites shifted from mudwall to frame in the eighteenth century. Evidence has also been presented that there were two building episodes at 38BK76; this indicated that there was an increase in the size of the slave quarter around the time that Thomas Cordes began to live at the plantation in the early 1780s. The earlier portion of 38BK76 may also have housed the overseer in the early years of the plantation. At 38BK245, brick construction superceded trench construction for special use structures, as shown by the naval stores trench structure and the administrative brick structure.

Size and Form

Size of the buildings was analyzed in two ways. In the first comparison, a basic construction unit was examined. This was the bay, or the largest single area encompassed by rows of posts whether in trenches or postholes. This is termed a "building unit" by Deetz (1977:149-150). In the second comparison, whole structures, which might have included from one to three units and any porch or shed additions, were used. Both sets of comparisons proved useful in understanding the architecture.

The bay or building unit comparison resulted in two statistically distinct categories; these were small building units and large building units (Figure 71; Table 26). The small building units averaged 145 square feet. South's (1977a:119) method for determining a range around the mean resulted in a 95 percent probability range of 120.7 to 169.3 square feet for the smaller units. The larger units averaged 256 square feet with a 95 percent probability range of 185.8 to 326.2 square feet.

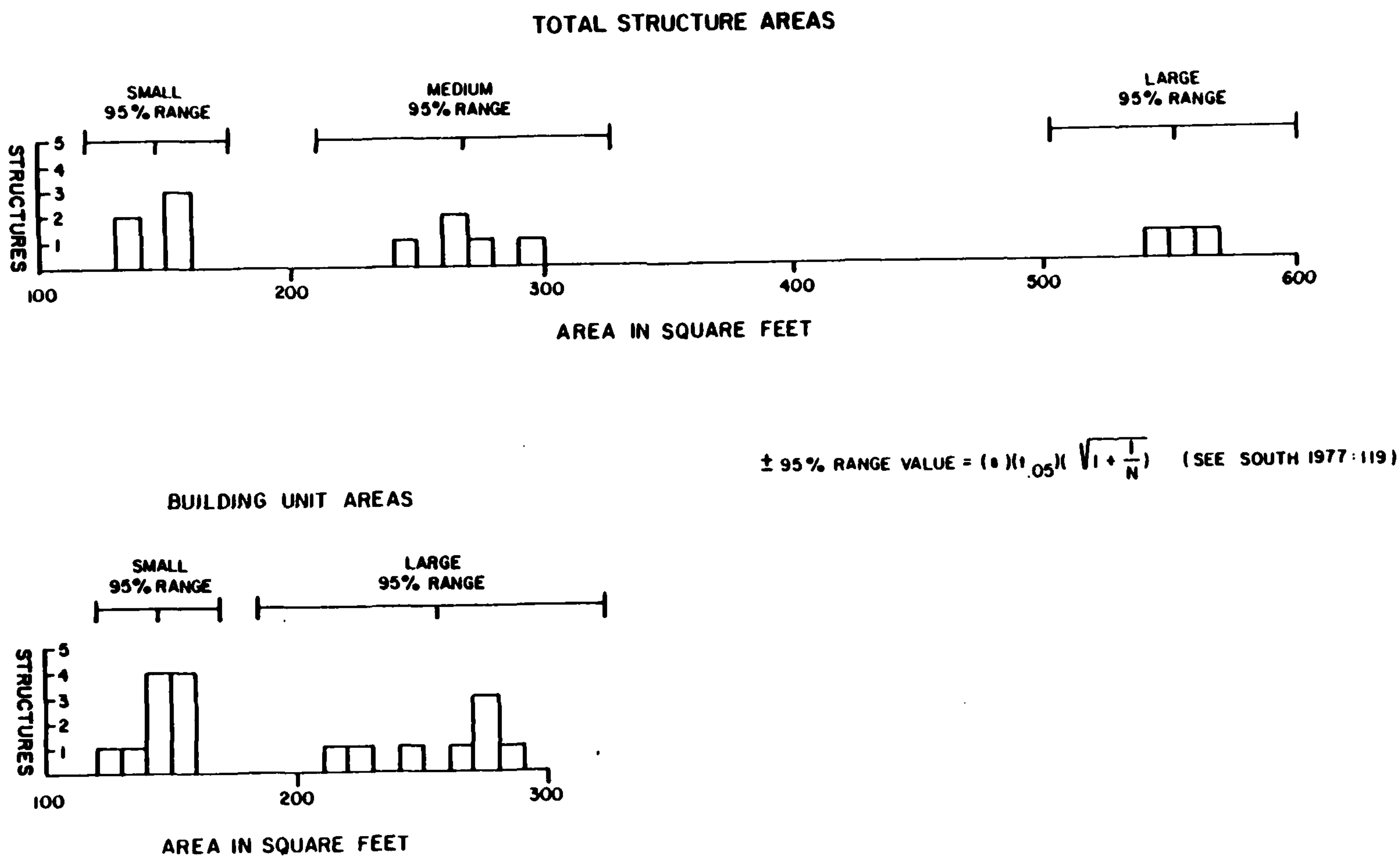


FIGURE 71
Building Unit and
Structure Areas
Curriboo and Yaughan
Plantations

TABLE 26

Widths, Lengths, and Areas of Building Units

WIDTH	LENGTH	W/L	AREA	TYPE STRUCTURE	LOCATION	FOUNDATION TYPE*
9.5	13.0	.73	124.0	mud wall hut	76A	T
10.25	12.75	.80	130.7	frame hut	75B 2	P
9.75	14.5	.67	141.4	mud wall hut	76G	T
10.75	13.5	.80	145.1	frame overseer's house	76D	T
11.5	13.0	.88	149.5	mud wall hut	76E	T
11.5	13.0	.88	149.5	frame overseer's house	76M	P
10.0	15.0	.67	150.0	mud wall hut	245E	T
9.75	15.5	.63	151.1	mud wall hut	76L	T
11.0	12.5	.88	153.0	frame hut	75B 1	P
12.0	13.0	.92	156.0	frame hut or shed	76I	P
10.6	13.6	.79	145.0		MEAN	
Mean 95% Range						
8.5-	11.1-	.54-	120.7-			
12.7	16.1	1.04	169.3			
11.69	18.13	.64	212.0	mud wall hut	76B 1	T
12.0	18.5	.65	222.4	mud wall hut	76F	T
11.5	21.5	.53	247.25	mud wall hut	76C	T
14.0	18.75	.75	262.5	mud wall hut	76K	T
13.5	20.0	.68	270.0	mud wall hut	245D	T
13.75	19.75	.70	271.6	mud wall hut	245D	T
14.0	19.5	.72	273.0	frame or mud wall hut	245B	T
14.0	20.5	.68	287.0	frame or mud wall hut	245B	T
13.1	19.6	.67	256.0		MEAN	
Mean 95% Range						
10.3-	16.8-	.50-	185.8-			
15.9	22.4	.84	326.2			
8.5	10.0	.85	85.0	frame shed	76J	P
10.0	10.0	1.00	100.0	frame shed	75C	P
10.0	16.5	.61	165.0	office	245C	B
18.0	18.0	1.00	324.0	frame hut or shed	76B 2	P
23.75	41.5	.57	986.6	frame barn	245H	T
8.5	18.0	.47	153.0	frame or open shed	245G	P
10.5	17.0	.62	178.5	frame overseer's house	76D	P

* T = trench, P = posthole, B = brick

It was noticed that the large house units seemed to occur with trench foundations, whereas the small units occurred with both foundation types. A Fisher exact test showed that the probability of such a pattern occurring by chance was only .0686, or very close to the .05 level of significance. It was therefore concluded that small units were used when constructing trench and posthole structures and larger units were used only for trench structures. Although neither the building units nor foundation type were one to one indicators of chronology, there were more small posthole structures at 38BK75 than at the earlier sites.

The building units could be and were added together, end to end, to produce larger multiple bay structures. Such structures resembled the typical shotgun pattern (as noted for Structure 76D). It is interesting that with all of the possible combinations of trench, post, and large and small units, only a few patterns for multiple structures were actually employed. These total structures could be statistically grouped into only three sizes: small structures which averaged 145 square feet; medium-sized structures which averaged 257 square feet; and large structures which averaged 552 square feet (Table 26). That these total sizes were not simply multiples of the unit sizes was explained by inclusion of porches and other additions to the core structure. At the 95 percent level of probability none of the total structure floor space ranges overlapped (Table 26).

The literature, although incomplete, was consulted to discover whether the units fit patterns on other slave, Anglo-American, or African sites. The widths, lengths, width to length ratios, areas, and house types and locations from various sources (Deetz 1977; Fairbanks 1972; Vlach 1977; Otto 1975; Genovese 1976; Glassie 1975; Mullins 1980; Baker 1978; Drucker and Anthony 1979, Leavitt 1980, Kelso 1980) are presented in Table 27. Some of this information was from single structures and some involved theoretical constructs or ideal building units developed by the various investigators.

Comparing areas produced some exact or nearly exact matches between the Cooper River structures and the comparative literature. Table 27 presents four occurrences of 144 square feet; these were a shotgun house in New Orleans, two freed slave houses in New England, and a "typical" West African house. An area of 144 square feet was only one square foot less than the small bay average. Two occurrences similar to our large bay structure were found; these were a "typical" African structure in the Caribbean and Deetz's and Glassie's "typical" Anglo-American building unit, at 252 and 256 square feet, respectively. The 252 square foot unit was only 4 square feet from our average, and 256 was, of course, exactly the same.

These comparisons were only suggestive, especially because the size of structures was easily limited by the amount and kind of materials available regardless of the cultural biases of the builder. Therefore, size may not be the best criteria for indicating the mind set which conceived the structures. Comparison of the length to width (W/L) ratios, which should remain constant whether a building unit is large or small, may be a more lucrative approach to examine cultural differences and similarities.

TABLE 27
Various Building Unit Dimensions Compared

	WIDTH	LENGTH	W/L RATIO	AREA	HOUSE TYPE LOCATION	GENERAL CONSTRUCTION DATE (CENTURY)	REFERENCE
*	9.0	12.0	.75	108.0	freed slave - Parting Ways	18th	Deetz 1977:149-150
*	8.2	16.1	.51	132.0	slave - Kingsley Plantation	19th	Fairbanks 1974:108
*	12.0	12.0	1.00[x]	144.0[S]	freed slave - New Orleans	19th	Vlach 1977:52
*	12.0	12.0	1.00[x]	144.0[S]	freed slave - Parting Ways	18th	Deetz 1977:150
	12.0	12.0	1.00[x]	144.0[S]	"typical" - West Africa		Deetz 1977:150
*	12.0	12.0	1.00[x]	144.0[S]	freed slave - Black Lucy's Garden	19th	Baker 1978:8
*	12.0	14.0	.86	168.0	shotgun - Port au Prince	19th	Vlach 1977:52
*	12.0	14.0	.86	168.0	slave - Altama Plantation	19th	Otto 1975:104
*	12.6	16.1	.78	203.0	slave - Kingsley Plantation	19th	Fairbanks 1974:108
*	12.6	16.4	.77	206.6	slave - Littletown Quarter	18th	Kelso 1980 per. communica.
*	11.8	21.3	.55	251.34	domestic slave - Sinclair	19th	Mullins 1980
	14.0	18.0	.78[x]	252.0[L]	"typical" African Caribbean		Genovese 1974:528
*	16.0	16.0	1.00	256.0[L]	"typical" Anglo-American Unit	19th	Deetz/ Kniffen 1977:149-150 1965:565
	16.0	18.0	.89	288.0	slave "ideal"	19th	Otto 1975:103

TABLE 27 (continued)

*	15.5	18.9	.82	292.6	slave - Spiers Landing	19th	Drucker & Anthony 1979:91
*	13.1	23.0	.57	301.3	slave - Hampton Plantation	19th	Mullins 1980
	16.0	20.0	.80	320.0	slave "ideal"	19th	Otto 1975:103
*	17.0	20.0	.85	340.0	slave - Cannon's Point	19th	Otto 1975:112
*	16.4	22.2	.74	364.1	slave - Littletown Quarter	18th	Kelso 1980 per. communica.
*	20.0	20.0	1.00	400.0	slave - Shirley Plantation	19th	Leavitt 1980 per. communica.
*	20.0	22.5	.89	450.0	slave - Cannon's Point	19th	Otto 1975:111
	14.8	16.4	.90	242.7	overseer Cannon's Point	19th	Otto 1975:118

*Indicates structural dimensions used to compare width/length ratios over time

K Within Cooper range

S Small bay

L Large bay

Table 28 summarizes the W/L ratios already presented in Table 26 (the Yaughan and Curriboo structures) and in Table 27 (structures from the comparative literature). The average ratios from Yaughan and Curriboo included only what were considered to be slave dwellings and did not include sheds, barns, the office at 38BK245, or the hypothesized overseer's house at 38BK76 (Structures 76D and 76M). The average ratios from the comparative literature did not include the "ideal" slave dwellings, the "typical" West African house, or the "typical" African-Caribbean house, since examples of actual slave occupied structures were comparatively numerous, and it was difficult, if not impossible, to determine how these "ideal" and "typical" ratios were arrived at. The "typical" Anglo-American building unit, on the other hand, was included in the third column because few such structures were included on the list and the basis for the unit has been thoroughly researched by Glassie (1975) and accepted by Deetz (1977).

TABLE 28. Average Width/Length Ratios

	Slave	Freed Slave	Anglo-American
Comparative Literature	.76	.96	1.00
38BK76 Group A	.75	-	-
38BK76 Group B	.68	-	-
38BK75	.84	-	-
38BK245	.69	-	-
2 Standard Deviation Range	.52-.92		
Observed Range	.53-.88		
Total Curriboo and Yaughan	.72		

The first striking characteristic notable in Table 28 was that slave structures were much more rectangular than freed slave and white structures, and that the freed slaves and Anglo-American ratios were not included within two standard deviations of the slave mean. Considering that a ratio of 1.00 is square, the freed slave and Anglo-American structures were nearly square, whereas slave structures definitely were not. It was also apparent that freed slaves, who presumably would have been much more acculturated than slaves, built structures of essentially the same shape as their white neighbors. If freed slaves were indeed more acculturated and this was reflected in the width/length ratios of their houses, then such a scale might be useful in examining the extent of acculturation evident in structures built and occupied by slaves.

Table 28 shows that the different portions of the slave quarters at Yaughan and Curriboo seriated from the least square, 38BK76 Group B and 38BK245 to 38BK Group A, to the most square (or approaching squareness) at 38BK75. This seriation obviously did not represent time, i.e., from the earliest to the latest, since a strictly temporal seriation based on MCDs was 38BK245 (1760.5) to 38BK76 Group A (1761.5) to 38BK Group B (1779.2) and 38BK75 (1789.8).

Since the sites were not seriated by time and squareness seemed to be a measure of acculturation, it was concluded that the sites were seriated by the degree of acculturation (Table 28) and that 38BK76 Group A again appeared to be more acculturated than 38BK76 Group B.

Many more separate houses would have to be examined with better controls before statistically meaningful comparisons could be made. But it does seem that one of the first avenues for investigating the origins of slave architecture in the eighteenth century might be West Africa and the Caribbean as noted from this discussion of shape and in Table 26 and 27.

Before leaving the subject of structures, another facet of plantation culture can be examined through study of the structures. Documentary evidence has shown that eighteenth century plantations in coastal South Carolina were not as specialized as they were to become by the nineteenth century. In particular, early in the eighteenth century when plantations were first being settled, plantation owners experimented with various methods of producing income. Samuel Cordes at Curriboo plantation was no exception.

The structure associated with naval stores production at Structure 245C was one example of such activity. The brick clamp at Structure 245K provided another example. Samuel Dubose (n.d.), in his book on St. Stephens' parish, noted that Samuel Cordes attempted to obtain the contract for the bricks used to build the parish church. However, he was unsuccessful because of the poor quality of his brick. The brick clamp at 245K may have represented an archaeological manifestation of this effort. Since Cordes was unsuccessful, it could be assumed that he used the bricks himself. As a result of the severe damage to Curriboo by excavation of the borrow pit, it was impossible to determine whether there may have been other brick clamps at the site. With the limited data at hand (Appendix E), it was hypothesized that the brick piered structure at Structure 245C was built with bricks from the clamp at Structure 245K. This was tested by measuring the bricks at both loci and statistically comparing them. Although the two sets exhibited variability, it was hoped that they would be statistically similar enough to conclude that the clamp could have produced the bricks at the structure. The means of height, width, and length were all within one standard deviation of each other and were therefore similar enough to have come from the same brick population (Appendix E). It was therefore concluded that the bricks at Structure 245C could have come from the kiln at 245K.

Summary

This chapter has presented and briefly discussed the structures and features at Sites 38BK75, 38BK76, and 38BK245. These structures were then compared from intra-site, inter-site, and off-site perspectives in order to examine the hypotheses established for the structures. It was shown that:

- Posthole structures superceded trench structures at 38BK75 and 38BK76.
- Brick construction superceded trench construction for major outbuildings at 38BK245
- Posthole distances increased over time, implying a change in superstructure, probably from mudwall to frame.
- No chimneys or interior hearths were used at the sites.
- Orientation of the structures indicated two building episodes at 38BK76.
- The structures at 38BK245 were the most regular in size, construction quality, and layout. Site 38BK76 showed great variability in these factors.
- Structures 76D and 76M at 38BK76 were sufficiently unique in size, shape, construction, and artifact assemblages to indicate that they may have been used by an overseer during a portion of their occupancy.
- Length to width ratios indicated a change from rectangular structures similar to Afro-Caribbean patterns to squarer structures similar to Anglo-American house patterns.
- The owner of Curriboo Plantation engaged in the production of naval stores and bricks.

VIII. ARTIFACT ANALYSIS

Introduction

One of the goals of this project was to delineate and compare artifact patterns. To accomplish this goal and to make the product of our research comparable to that produced by other researchers, it is essential to give explicit definition to the terms and artifact types discussed in this report. Existing published typologies have been used to the extent possible. In a few cases, typologies were developed, either because existing descriptions did not cover all of our material, or because the quantity of our material allowed refinements to be made in existing typologies. The artifacts are summarized by site and structure in Table 29 and Table 30.

Table 29 presents the total artifacts from each site by artifact type. Each type is listed with its artifact group as established by South (1977a:92-102). The three left hand columns on the table represent actual counts and the three right hand columns represent the relative amounts of each artifact type based on South's (1977a) patterns. For this reason nonlocal ceramics which postdate the main occupation and unidentified iron were excluded from the artifact totals. Other changes from South's (1977a) patterns are explained in detail in the following chapter. Table 30 represents the same kind of data following the same organization, except that selected structures are shown rather than complete sites. Structures 76A, 76B, 75B, and 245C were block excavations and 76D is included because it plays a prominent role in the discussion of site function. The totals for Structure 76D include all material excavated from features and surface collections in the vicinity of the structure.

The main published sources used in the course of analyzing the 35,297 artifacts retrieved were South (1977a) and Noel Hume (1978). These were supplemented with more restricted analyses of particular categories, and a brief list of the most useful references in selected categories follows:

Ceramics - Lofstrom (1976), Bartovics (1977), Miller and Stone (1970), Palmer (1976), Shepard (1965), Ferguson (1977), Gartley (1979), Handler (1963 and 1964), Handler and Lange (1978), Quimby (1973), Anthony (1979), Drucker and Anthony (1979).

Gun Parts - Stone (1974), Ferguson (in South 1977b)

Bottle Glass- Jones (1971), Douglas and Frank (1972)

Architecture- Vlach (1977), Bonner (1945), Glassie and Kniffen (1972), Drucker and Anthony (1979)

Furniture - Olsen (1963)

Tobacco Pipes- Petersen (1963), Walker (1967)

TABLE 29. Total Artifacts by Site and Type

ARTIFACT CATEGORY	Site Totals 38BK75	Site Totals 38BK76	Site Totals 38BK245	Site Percentages 38BK75	Site Percentages 38BK76	Site Percentages 38BK245
Olive wine bottles	400	1631	642	6.37	7.31	11.02
Bluish olive wine bottles	15	9	5	.24	.04	.09
Other olive glass	10	40	7	.16	.18	.12
Clear bottle glass	68	164	23	1.08	.73	.39
Green tinted bottle glass	63	118	12	1.00	.53	.21
Amethyst bottle glass	1			.02		
Table knives	1	2	5	.02	.01	.09
Forks	2	2	1	.03	.01	.02
Other tableware	4	3	1	.06	.01	.02
Other kitchenware	5	5	3	.08	.02	.05
Kettle fragments	8	14	3	.13	.06	.05
Clothing iron		1			.01	
Non-local ceramics	1022	1627	445	16.28	7.29	7.64
Colono pottery sherds	2545	15043	3316	40.55	67.38	56.91
Catawba	295	141	17	4.70	.63	.29
Non-local ceramics (unidentifiable)	[33]	[42]	[3]			
KITCHEN GROUP TOTAL	4439	18800	4480	70.73	84.20	76.88
Flat glass	72	101	114	1.15	.45	1.96
Cut nails	37	175	4	.59	.78	.07
Wrought nails	8	89	80	.13	.40	1.37
Door locks	3		3	.05		.05
Other architectural hardware/objects	5	10	4	.08	.04	.07
Unidentified nails	1444	2265	760	23.01	10.14	13.08
ARCHITECTURE GROUP TOTAL	1569	2640	965	25.00	11.82	16.56
Furniture hardware	5	12	4	.08	.05	.07
FURNITURE GROUP TOTAL	5	12	4	.08	.05	.07
Musket balls and shot	10	2	8	.16	.01	.14
Gunflints and spalls	1	2	8	.02	.01	.14
Gun parts		1	1		.01	.02
ARMS GROUP TOTAL	11	5	17	.18	.02	.29

[ ] not used in artifact pattern percentages

TABLE 29. (continued)

ARTIFACT CATEGORY	Site Totals 38BK75	38BK76	38BK245	Site Percentages 38BK75	38BK76	38BK245
Clothing buckles	2	6	2	.03	.03	.03
Sewing equipment (thimble and pins)		2	1		.01	.02
Silver plate buttons	3	3	2	.05	.01	.03
White metal buttons	8	7	5	.13	.03	.09
Lead buttons	1	10	2	.02	.04	.03
Iron buttons	5	2		.08	.01	
Gold button		1			.01	
Bale seals			2			.03
Glass beads	1	20	3	.02	.09	.05
Brass and copper buttons	12	15	4	.19	.07	.07
CLOTHING GROUP TOTAL	32	66	21	.51	.30	.36
Coins	1			.02		
Keys		3	2		.01	.03
Other personal items	3	2		.05	.01	
PERSONAL GROUP TOTAL	4	6	2	.06	.03	.03
Pipe parts	182	744	306	2.90	3.33	5.25
Colono pipes		8	4		.04	.07
TOBACCO GROUP TOTAL	182	752	310	2.90	3.37	5.32
Clasp knives	8	13	10	.13	.06	.17
Other tools	3	2	4	.05	.01	.07
Colono toys	1	4		.02	.02	
Fishing gear		5			.02	
Unidentified - iron	[380]	[297]	[112]			
Harness parts	2	3	4	.03	.01	.07
Hoes	7	3	4	.11	.01	.07
Other artifacts and Colono objects	4	6	4	.06	.03	.07
Unidentified - lead	8	7	1	.13	.03	.02
Unidentified - brass/copper	1	3		.02	.01	
ACTIVITIES GROUP TOTAL	34	46	28	.54	.21	.48
TOTALS for South's (1977a) Pattern	6276	22327	5827 = 34430			
GRAND TOTAL (including metal and ceramics)	6689	22666	5942 = 35297			

TABLE 30. Total Artifacts for Selected Structures

ARTIFACT CATEGORY	Structure Totals 76A	76B	75B	245C	76D
Olive wine bottles	260	639	266	22	21
Bluish olive wine bottles		3	11		
Other olive glass	9	5	7	1	1
Clear bottle glass	22	105	55		2
Green tinted bottle glass	16	78	60	1	1
Table knives	2		1		
Forks		1	2	1	
Other tableware	1		8		1
Other kitchenware	3			1	
Kettle fragments	4	3	3		1
Nonlocal ceramics	173	691	526	9	18
Colono pottery sherds	4586	6762	2174	25	204
Catawba	32	85	280		3
KITCHEN GROUP TOTAL	5108	8372	3393	60	252
Flat glass	34	31	68	52	1
Cut nails	22	132	35		
Wrought nails	7	53	6	19	
Door locks				3	
Other architectural hardware/objects	1	3	4	2	2
Unidentified nails	865	902	1290	132	68
ARCHITECTURE GROUP TOTAL	929	1121	1403	208	71
Furniture hardware	2	7	3		
FURNITURE GROUP TOTAL	2	7	3		
Musket balls and shot	1	1	8	2	
Gunflints		1			
ARMS GROUP TOTAL	1	2	8	2	

TABLE 30. (continued)

ARTIFACT CATEGORY	Structure Totals				
	76A	76B	75B	245C	76D
Clothing buckles	2	3	2		
Sewing equipment	1			1	
Silver plate buttons		3	3		
White metal buttons		3	7		
Lead buttons	1	5	1		1
Iron buttons		2	4		
Gold button	1				
Glass beads	2	7	1		
Other clothing articles			2		
Brass and copper buttons	1	10	9		
CLOTHING GROUP TOTAL	8	33	29	1	2
Coins			1		
Keys	2				
Other personal items		2	3		
PERSONAL GROUP TOTAL	2	2	4		
Pipe parts	201	295	123	10	12
Colono pipes	2	3			
TOBACCO GROUP TOTAL	203	298	123	10	12
Clasp knives	6	6	3	3	1
Other tools		2	3		
Colono toys	3		1		
Fishing gear		2			
Harness parts		2	2		
Hoes			6	1	
Other artifacts and Colono objects	5	4	4	1	
Unidentified - lead	3	2	4		
Unidentified - brass/copper		2	1		
ACTIVITIES GROUP TOTAL	18	20	24	5	1
TOTALS (for South's (1977a) pattern	6271	9855	4987	286	339

TABLE 30. (continued)

ARTIFACT CATEGORY	Structure Percentages 76A	76B	75B	245C	76D
Olive wine bottles	4.15	6.48	5.33	7.69	6.19
Bluish olive wine bottles		.03	.06		
Other olive glass	.14	.05	.10	.35	.29
Clear bottle glass	.35	1.07	2.10		.59
Green tinted bottle glass	.26	.79	1.56	.35	.29
Table knives	.03		.02		
Forks		.01	.04	.35	
Other tableware	.02		.16		.29
Other kitchenware	.05			.35	
Kettle fragments	.06	.03	.06		.29
Nonlocal ceramics	2.76	7.01	10.55	3.15	5.31
Colono pottery sherds	73.13	68.61	43.59	8.74	60.18
Catawba	.51	.86	5.61		.88
KITCHEN GROUP TOTAL	81.45	84.95	68.04	20.98	74.34
Flat glass	.55	.31	1.36	17.13	.29
Cut nails	.35	1.34	.70		
Wrought nails	.11	.54	.12	6.64	
Door locks				1.05	
Other architectural hardware/objects	.02	.03	.08	.70	.59
Unidentified nails	13.79	9.15	25.87	46.15	20.06
ARCHITECTURE GROUP TOTAL	14.81	11.37	28.13	72.73	20.94
Furniture hardware	.03	.07	.06		.29
FURNITURE GROUP TOTAL	.03	.07	.06		.29
Musket balls and shot	.02	.01	.16	.70	
Gunflints		.01			
ARMS GROUP TOTAL	.02	.02	.16	.70	

TABLE 30. (continued)

ARTIFACT CATEGORY	Structure Percentages 76A	76B	75B	245C	76D
Clothing buckles	.03	.03	.04		
Sewing equipment	.02			.35	
Silver plate buttons		.03	.06		
White metal buttons		.03	.14		
Lead buttons	.02	.05	.02		.29
Iron buttons		.02	.08		
Gold button	.02				
Glass beads	.03	.07	.02		.29
Brass and copper buttons	.02	.10	.18		
CLOTHING GROUP TOTAL	.13	.33	.58	.35	.59
Coins			.02		
Keys	.03				
Other personal items		.02	.06		
PERSONAL GROUP TOTAL	.03	.02	.08		
Pipe parts	3.21	2.99	2.47	3.50	3.54
Colono pipes	.03	.03			
TOBACCO GROUP TOTAL	3.24	3.02	2.47	3.50	3.54
Clasp knives	.11	.07	.06	1.05	.29
Other tools		.02	.16		
Colono toys	.05		.02		
Fishing gear		.02			
Harness parts		.02	.04		
Hoes			.12	.35	
Other artifacts and Colono objects	.08	.04	.14	.35	
Unidentified - lead	.05	.02	.08		
Unidentified - brass/copper		.02	.01		
ACTIVITIES GROUP TOTAL	.29	.20	.48	1.75	.29

As noted in the section of this report discussing the testing phase, no attempt will be made here to analyze the artifacts from the tree fall (38BK73). The following discussion only concerns material recovered from 38BK75, 38BK76, and 38BK245. Further, it should be noted that only artifacts which contribute to the elucidation of our research goals or for which we have been able to add new insights are discussed here. All other historic artifacts are described in Appendix E. Prehistoric artifacts are presented in Appendix A.

Ceramics

Nonlocal (generally English) ceramics were represented by 3171 sherds from all three sites, or 9.0 percent of the total artifact assemblage for the project. Site 38BK75 had 1054 sherds, Site 38BK76 had 1669, and Site 38BK245 had 448. Of these sherds, 77 were unidentifiable as to type or ware because of a lack of glaze, burning, or because of their small size. These unidentified sherds are not included in the analyses which follow.

A total of 63 nonlocal ceramic types were distinguished during the course of analysis and, along with a category of unidentified ceramics, were given computer code numbers for a total of 64 numbers. Three of these types were not considered to be pertinent to the main occupation of the sites. These were two plain whiteware types determined to date from the 1830s or 1850s to the present, and a third category including all other twentieth century ceramic types found on the surface and probably discarded as trash by the present inhabitants of the area. The remaining 60 distinguishable types differed occasionally from accepted usage, particularly when such divisions of established types proved to be helpful in understanding cultural processes. Table 31 presents the ceramic types found at the sites and organized by ware. Included on the table are mean ceramic dates (MCD) when these could be obtained, the reference for each MCD, and the total number of sherds at each site.

The redwares and slipwares are discussed in some detail since it has been possible to identify types of these wares which seriate in time and may, therefore, be useful in comparative chronological studies. Redware is defined as those types which have a brick red, porous body and occasionally may have minor amounts of fine nonplastics. Surface treatment varied from unslipped and unglazed types to types which had one or more slips and clear or opaque glazes. Some of these types are lumped together with buff bodied and variously decorated types by other investigators. However, some of the decorative techniques, motifs, and vessel forms were unique to the red bodied ceramics; therefore, these types are separately described here.

The sorting criteria defined five types of redware, Thin Black Glazed, Thick Black Glazed, Clear Glazed, Trailed, and Funnelled Redware. Thin and Thick Black Glazed Redware were differentiated primarily on thickness and vessel form and may have represented varieties of the same type. The thin type would resemble Jackfield on complete cups and bowls when the paste was not visible. The thick type was used on larger vessels, mixing bowls, or deep plates, and was sometimes glazed only on one surface. Clear Glazed Redware had a clear probably lead glaze and resembled Thin Black Glazed in thickness and form. Trailed and Funnelled Redware may have been varieties of Clear

TABLE 31. Nonlocal Ceramics (See Appendix E)

Ware	Type	MCD	MCD Reference	Total	38BK75	38BK76	38BK245
Porcelain	Oriental Blue on White	1730*	South 1977:210	238	11	163	64
	Oriental Polychrome Overglaze	1730*	"	112	20	62	30
	Plain Oriental	1730*	"	12		12	
	European	1770*	"	3		3	
Stoneware	British Brown	1733	"	215	113	66	36
	Nottingham	1755	"	11		6	5
	Burslem	1738	"	2		2	
	Rhenish (Westerwald)	1738	"	80	46	21	13
	Black Basalt	1785	South 1977:211	19	13	5	1
	Refined Red						
	Clear Glaze	0*		3		2	1
	Marbled Glaze	0*		2		1	1
	Plain Unglazed	1769	South 1977:211	22	20	2	
	White Salt Glazed						
	Scratch Blue	1760	South 1977:210	1		1	
	Debased Scratch Blue	1780	"	13		13	
	Handpainted Polychrome	1760	Miller and Stone 1970:72	1		1	
	Plain	1758	South 1977:211	79		62	17
	Plain Brown (various types)	0*		43	19	11	13
	Plain Gray (various types)	0*		25	10	6	9
Refined Earthenware	Jackfield	1760	South 1977:211	15		11	4
	Agateware	1758	"	1			1
Creamware	Light Yellow	1798	South 1977:212	798	166	540	92
	Dark Yellow	1771	"	2	1	1	
	Green (Whieldon-like)	1767	South 1977:211	10		7	3
	Clouded	1755	"	2		1	1
	Polychrome	1788	South 1977:212	4			4
	Marbled	1805	"	11		10	1
	Edged	0*		1		1	

TABLE 31 (continued)

Ware	Type	MCD	MCD Reference	Total	38BK75	38BK76	38BK245
Pearlware	Blue Handpainted	1800	South 1977:212	70	16	48	6
	Brown Handpainted	0*		2	2		
	Edged	1805	South 1977:212	116	69	38	9
	Polychrome	1805	"	36	27	9	
	Transfer Print	1818	"	119	79	36	4
	Plain Annular	1805	"	37	24	13	
	Marbled	1805	"	24	24		
	Plain	1805		380	243	109	28
	Mocha	1843	South 1977:212	19	19		
Whiteware	Blue Handpainted	1840*	Bartovics 1977	8		8	
	Polychrome	1848*	"	4		4	
	Edged	1855*	"	50	40	10	
	Plain	1898*		5		3	2
	Transfer Print	1848*	Bartovics 1977	2	1	1	
Delft	Blue and White	1750*	Miller and Stone 1970:28	26		23	3
	Polychrome	1750*	Miller and Stone 1970:34	14		14	
	Powdered	1775*	Miller and Stone 1970:40	11		11	
	Plain	1750*	South 1977:212	68	7	58	3
	Faience	1788*	South 1977:211	2		2	

TABLE 31 (continued)

Ware	Type	MCD	MCD Reference	Total	38BK75	38BK76	38BK245
Redware	Fine Black Glazed	1733	South 1977:211	22		22	
	Thick Black Glaze	1733	"	22	6	11	5
	Clear Glazed	1733	"	13	7	3	3
	Trailed	1733	"	5		2	3
	Funnelled	1733	"	20	13	4	3
Slipware	Plain Clear Glazed	1733	South 1977:211	22	5	17	
	Combed Clear Glazed	1733	"	18	2	14	2
	Trailed Clear Glazed	1733	"	27	14	13	
	Plain Tinted Glaze	1733	"	110	4	66	40
	Combed Tinted Glaze	1733	"	67	1	45	21
	Trailed Tinted Glaze	1733	"	32		22	10
	Black & Trailed Tinted Glaze	1733	"	11		8	3
Coarse Earthenware	Buckley	1748	South 1977:211	4		1	3
	North Devon	1713	"	3		2	1
Unidentifiable					32	42	3
Total				3171	1054	1669	448

*This type and MCD were not used in calculating site mean ceramic dates.

Glazed Redware, but were differentiated on the basis of decorative technique. Trailed Redware had a white slip applied to the surface in lines. Funnelled Redware had reddish brown and white slips applied simultaneously in wavy parallel lines. Both of these last two types were then covered with a clear glaze, were thick, and had forms restricted to large bowls or large round bottomed plates often with a "pie crust" rim. On Funnelled Redware the white slip tended to pop off, leaving the reddish brown lines in place. This was probably due to the better adhesion and expansion properties of the reddish brown slip.

Slipwares have been isolated from redwares on the basis of a buff paste, forms, and surface treatment. It was also found that once the slipwares were separated from the redwares and divided into types, these types seriate in time, which suggested their potential usefulness as relative dating tools. Slipwares were divided into two groups, those with a clear glaze and those with a yellow tinted glaze. The clear glazed group was further divided into three types, Plain Clear Glazed, Combed Clear Glazed, and Trailed Clear Glazed. In addition to having a buff paste and clear glaze, these types also shared similar bowl and cup forms. The major difference between them was surface treatment. Plain Clear Glazed included all those sherds which could not be definitely placed into either Combed or Trailed. Combed had a reddish brown slip covering the vessel in areas where decoration was desired. The entire exterior (and occasionally interior) surface was covered with a white slip and then scratched or combed to expose the reddish brown slip. Trailed had the white slip applied first and the reddish brown slip applied on top of it in lines and/or dots. These two methods of decoration were never mixed on the same vessel and were usually readily identifiable.

The second or tinted glaze slipware group was divided into four types; these were Plain Tinted Glaze, Combed Tinted Glaze, Trailed Tinted Glaze, and Black and Trailed Tinted Glaze. Plain Tinted Glaze Slipware had a yellow cast to an otherwise clear, probably lead, glaze. All of the undecorated sherds which could not be put into the Combed or Trailed types were included in this type. Combed and Trailed Tinted Glaze Slipware were manufactured and decorated in the same manner as the corresponding clear glazed types. The only discernible difference was the yellow tinted glaze. Black and Trailed Tinted Glaze also had the yellowish glaze, but was otherwise unlike any of the other types in surface finish. First, a black slip (actually a very dark reddish brown slip) was applied to the buff paste, then a white slip was trailed in narrow (± 3mm wide) lines or dots on the dark surface. The whole was then covered with a tinted glaze.

Figure 72 shows a seriation of the Clear and Tinted Glaze types using the relative frequencies of the types at four loci within the sites studied. Only the sherds from block excavation at Structures 76A and 76B were used from Site 38BK76. The percentages from 38BK75 represent material from the excavated block, and those from Site 38BK245 represent all material collected from the stripped area at that site. The chart clearly separates the clear glazed material (on the left) from the yellow tinted material (on the right) and correctly aligns the sites in time according to independent dating criteria, including MCDs and historical research. There was, of course, some overlap of the types as would be expected of sites which overlap in time. Two types, Plain Clear Glazed and Black and Trailed Tinted Glaze, did not

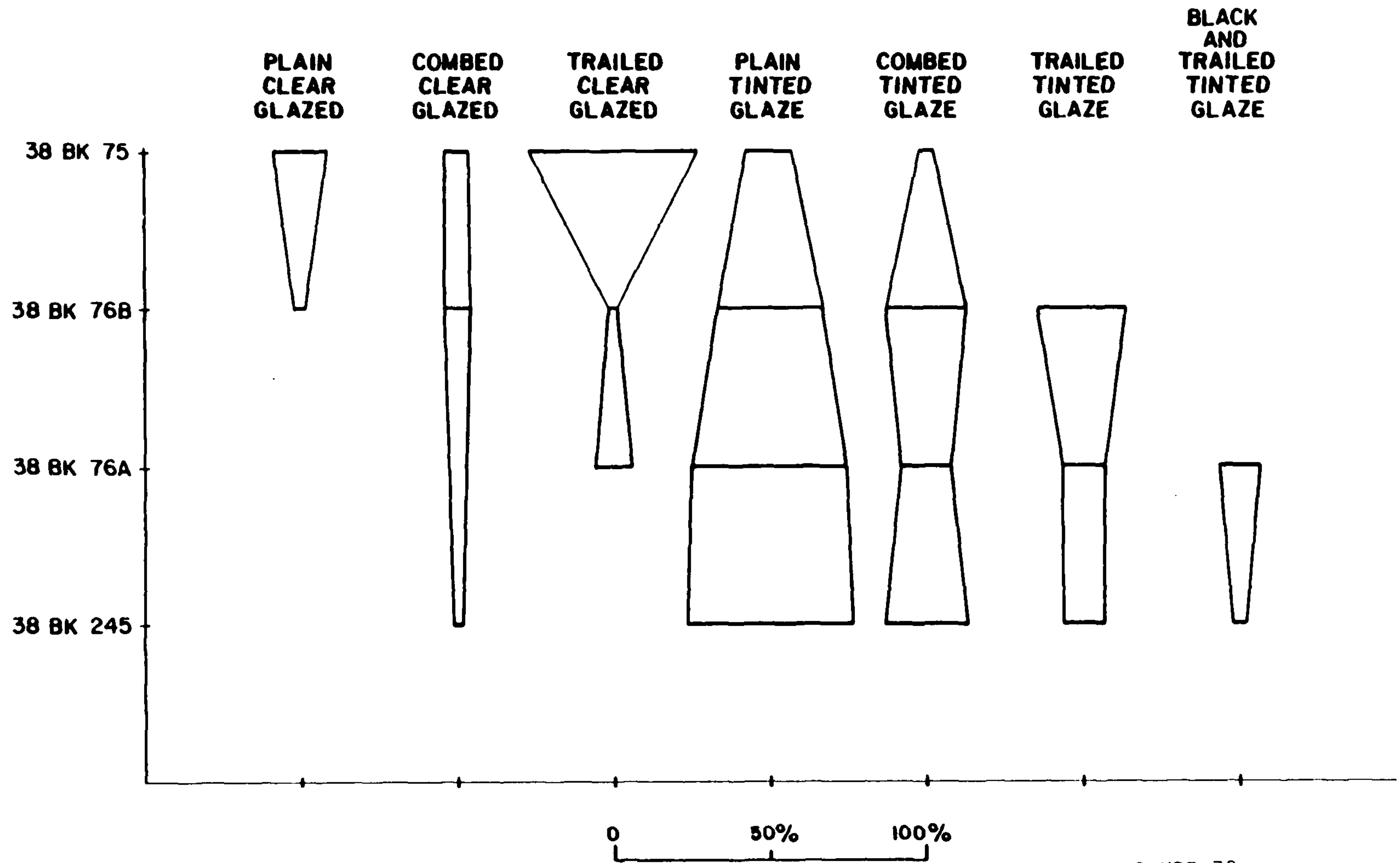


FIGURE 72
Slipware Seriation
Yaughan and Curriboo
Plantations

overlap and appeared to be the clearest time markers. The occurrence of only two combed Clear Glazed sherds at 38BK245 and no such sherds at Structure 76A at 38BK76 indicated that this type may also be a good indicator of later occupations.

The earlier occurrence of the yellow tinted glaze and the later clear glaze may show an improvement in glaze types used by one or more potteries which is distinguishable archaeologically. The independent relative dating of the seriation supports this hypothesis.

Unglazed coarse earthenware of local manufacture has usually been defined as prehistoric on primarily prehistoric sites and Colono-Indian on historic sites (Fairbanks 1962, South 1974:181, Noel Hume 1962, Ferguson 1977). As Ferguson and others have pointed out, there is reason to believe that not all Colono-Indian is, indeed, Indian. If it were possible to differentiate between Indian- and slave-made pottery at Yaughan and Curriboo plantations, and if this distinction could be extended to other sites, new avenues would be opened for exploring the economics and social organization of slavery in the American South. Once a differentiation could be made between Indian- and slave-made ceramics, new questions could be asked of the archaeological record. The presence or absence of slave or Indian ceramics could be examined not only in the older eastern seaboard areas, but also in other areas of the South where contacts with African slaves and native Indian groups were maintained. Some questions that might be explored are:

Why are there few examples of Indian- or slave-made ceramics after the 1830s? Why are there few examples of slave-made ceramics in the southeastern Piedmont and Sea Island areas of Georgia? What do the relative frequencies of Indian- or slave-made ceramics in relation to each other and to nonlocal ceramics tell us about the economic and social conditions of the makers and users of the ceramics? What differences are there between slave-made ceramics in Virginia as opposed to South Carolina in attributes such as form, decoration, method of manufacture, and function? And finally, where do the attribute modes found in slave-made ceramics come from: Africa? The West Indies? Only a few select areas? Are they a mixture of many different ceramic traditions, including native American?

The literature and, in a few cases, visual inspection of other collections indicate that probably both free Indians and slaves made ceramics for their own use and for trade and sale. For a more complete discussion of this subject, Ferguson's (1977) paper on the "'Afro' in Colono-Indian Pottery" should be consulted. Other researchers not referenced by Ferguson indicate the presence of unglazed ceramic forms similar to our material from slave sites on Barbados and Jamaica (Handler and Lange 1978, Ebanks 1974, and Matthewson 1973); St. Kitts, St. Thomas, St. John, St. Vincent, St. Martin, and St. Croix (Gartley 1979:47-61); Antigua (Handler 1964); in Virginia (Henry 1980); and Berkeley County, South Carolina (Anthony 1979).

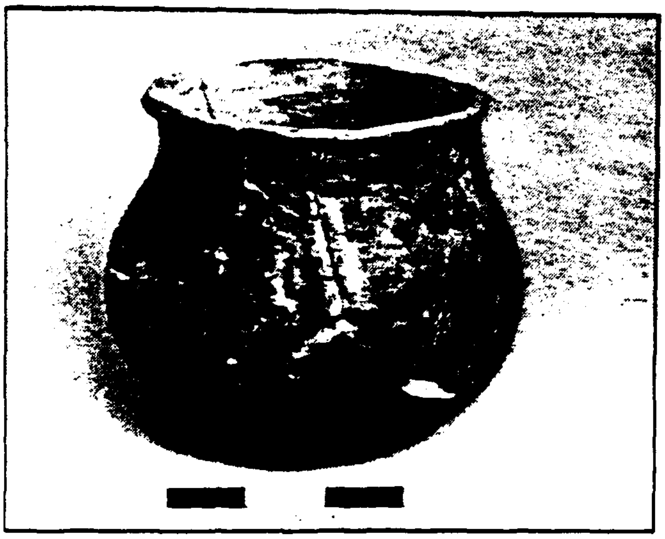
Leland Ferguson (personal communication 1980-81) is studying the regional variability of Indian- and slave-made ceramic attributes from Virginia to Georgia. More work is needed and will be done in the future. We feel that our contribution to the field can be a descriptive analysis of Indian- and slave-made ceramics and how these have shed light on our study of slavery at two plantations in South Carolina. With a collection of over 21,000 coarse unglazed sherds from both plantations, we feel that the contribution can be significant.

Even as work progressed during fieldwork, certain qualities of the unglazed earthenwares became obvious; these were their vast numbers, the lack of any decoration corresponding to the Woodland ceramics at 38BK76, the presence of red painted lines on the finer buff colored pieces, and the incidence of small jars or pots, especially evident at 38BK76. Perhaps as a result of these predispositions from the field the most interesting results of the analysis revolved around these same themes.

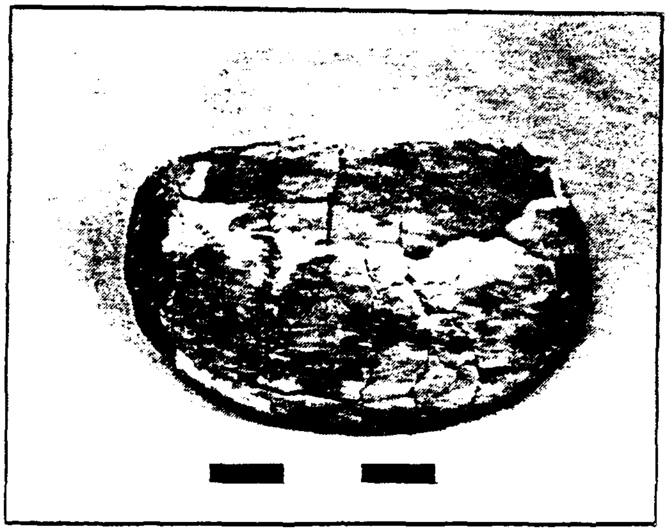
Since previous descriptions of Colonoware ceramics in the area (Drucker and Anthony 1979, and Anthony 1979, among others) were based upon relatively small samples and many were in the process of being written while our analysis was being conducted, we were unable to rely on published descriptions to any great extent. Our objective was to develop a typology based on the type-variety system (Matheny 1970; Smith, Willey, and Gifford 1960; Sabloff and Smith 1969; Haberland 1963; Wheaton 1976; and Ball 1973). The time and budget allowed for such a study was limited, however, and the results are not as detailed as we would have liked.

The analysis began by inspecting every sherd and grouping a large sample of similar sherds into ceramic units on the basis of paste color and texture, nonplastics, interior and exterior finish, surface color, and form. It became readily apparent that the variation in firing control and clay sources of the pottery was such that only two basic types could be consistently detected; these were a thicker, poorly fired, poorly manufactured type and a thinner, better fired and manufactured type. Internally, the thinner was more consistent in clay and nonplastics, as well as in color, than the thicker type. Further examination revealed that there were several mutually exclusive sets of attributes separating the two types, and that the thicker type could be further broken down into two varieties, tooled and smoothed. The attributes were thickness, form, surface finish and color, decoration, and to a lesser extent, method of manufacture. The salient sorting criteria are given below and vessel forms are presented in Figures 73 and 74. We have chosen, for reasons discussed below, to call the thicker type at Yaughan and Curriboo, Colono, and the thinner type, Catawba.

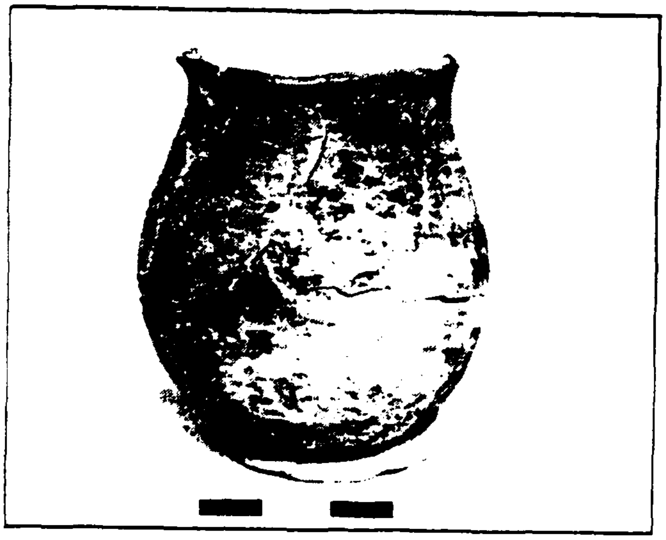
The Colono and Catawba rims were inspected to determine whether they were from one of the following rim/vessel types (Shepard 1965): open-incurving, closed-incurving, outsloping, outcurving, and unidentifiable. The lips were also inspected for a variety of attributes including rounded, flattened, folded, tapered, etc. Although the lip attributes were used in the ceramic typology, they did not provide useful information for form studies.



TOOLED JAR



SMOOTHED JAR, RIM INCOMPLETE



TOOLED PEDESTAL JAR

TOOLED OPEN INCURVING BOWL

FIGURE 73
Colono Pots

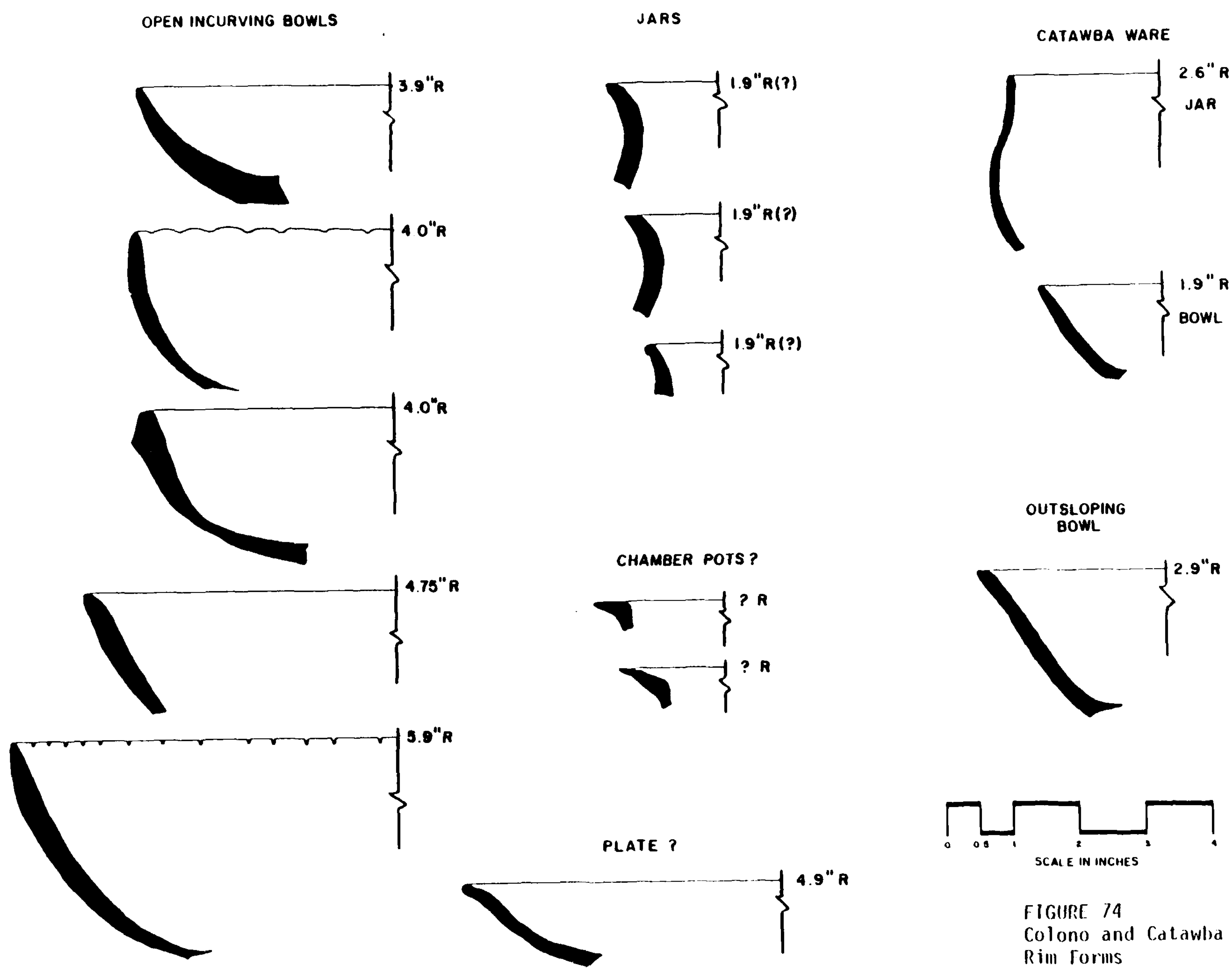
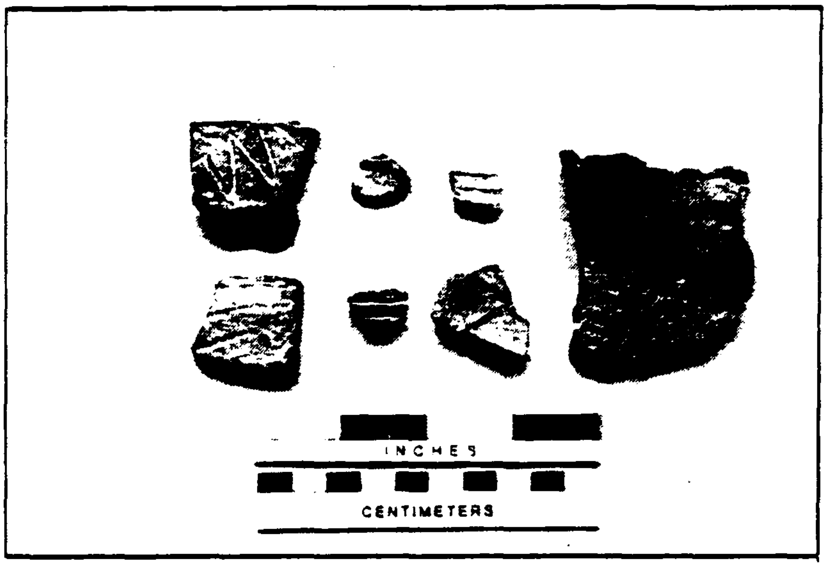


FIGURE 74
Colono and Catawba
Rim Forms

	COLONO	CATAWBA
Thickness	Average .725 cm thick up to very uneven on individual vessels and even single sherds.	Average ±.5 cm thick; 1.1 cm, regular and even.
Form	Generally open incurving bowls and small flared mouth jars, lips were crudely rounded, or flattened with a finger or stick.	Generally straight sided, open, outflaring bowls, and small well made jars, lips were tapered and well finished.
Body	Wide variation in size, amount and type of nonplastics, generally various water-washed sands, oxidation was usually not complete, leaving a dark core.	Limited variety of nonplastics, generally fine particle size and completely oxidized or completely reduced.
Surface	Ranged from crudely smoothed to polished with obvious evidence of the polishing tool, generally interiors of bowls and exteriors of jars were polished, color ranged from black to dark brown to reddish orange, great variation on individual vessels and sherds.	Usually highly polished on interior and exterior of bowls and wide mouthed jars, polish marks were often evident, color rangeds from black to gray to buff, little variation on individual sherds, some vessels were intentionally reduced.
Decoration	.3% had decoration on interior of bowls including prefiring notched rims, reed punctate, thimble impressed, incised lines; post firing incision in the form of a cross in a square and a circle occured on the interior bottoms of a few bowls (Figure 75).	3.5% of Catawba had undulating "day-glo" red painted lines on the exterior of jars and the interior of bowls applied after preliminary or final firing of the vessel; occasionally red dots were placed around the undulating line, or around small regular facets taken out of the interior lip; or both.
Method of Manufacture	Bases occasionally coil made and body was hand modelled, poor control over firing temperature and firing time, handles appeared to be attached to the surface of the vessel (Figure 76).	Evidence supports hand modelling but sample is too small for definite conclusions, firing temperature and time were well controlled, reduction when it occurs was intentional, handles had plugs on the end which were inserted in the wall and smoothed from the inside.

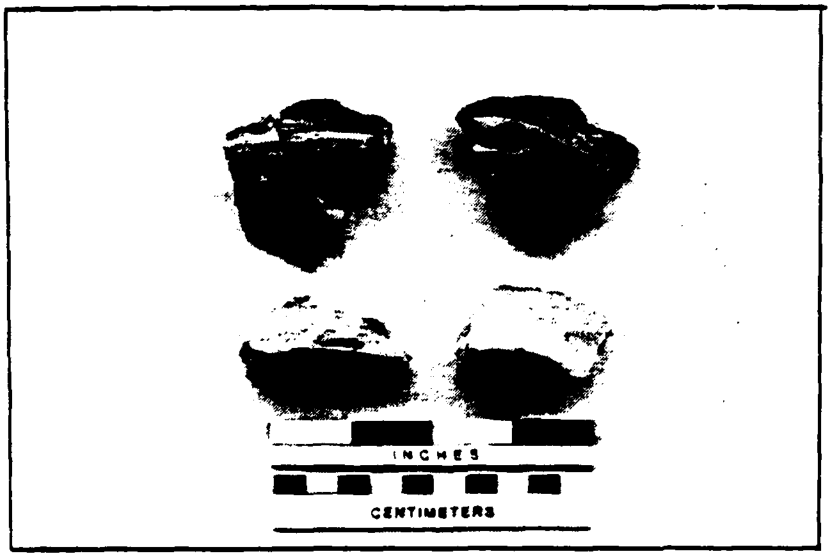


INCISED
TOP-3 INCISED
BOTTOM-3 INCISED
RIGHT-"PEELED" SURFACE ON PUNCTATE SHERD

PUNCTATE
LEFT-PIPESTEM PUNCTATE, SMALL REED PUNCTATE
CENTER-LARGE REED PUNCTATE
RIGHT TOP-PIPESTEM PUNCTATE, "HORSESHOE" PUNCTATE
RIGHT BOTTOM-SMALL REED PUNCTATE

SMOOTHED
TOP-INCURVING RIM, OUTCURVING JAR RIM
BOTTOM-2 OUTCURVING JAR RIMS

FIGURE 75
Decorated, Tooled, and Smoothed Colono Sherds



BASES
TOP - RING BASES
BOTTOM - PEDESTAL BASES

APPENDAGES
TOP - HANDLES
BOTTOM - LID HANDLE,
SUPPORT OR LUG HANDLE,
HANDLE

OBJECTS
TOP - FIGURE BASE (?),
PERFORATED STRAINER,
FINGER IMPRESSED CLAY LUMP,
PUNCTATED CLAY LUMP
BOTTOM - 3 MARBLES,
PIPE BOWL BASE,
2 PIPE STEMS

FIGURE 76
Colono Bases, Appendages, and Objects

Colono had two varieties, Smoothed and Tooled. As noted above, the surface finish on Colono varied widely. Smoothed Colono included those sherds with a poorly finished or wiped surface still showing evidence of finger impressions and a very uneven wall thickness on single vessels and sherds (Figure 75). The one reconstructed vessel of this variety was broken into much smaller fragments than any of the reconstructed vessels of the Tooled variety. This was probably because Smoothed sherds generally had more nonplastics than Tooled and were more friable. Possibly four of the Smoothed vessels at 38BK76 (minimum vessel counts were impossible within the project schedule) were very small jars, probably no more than a few inches high and half as wide (Figure 75). These appeared to have been made by or for children. Tooled Colono ranged from a poorly polished to fairly well polished surface, although the polishing marks usually did not overlap. On a few distinctive sherds the exterior surface appeared to have been cut or shaved, leaving large irregular facets. Although the range of nonplastics and thickness covered those of Smoothed Colono, the general trend was for Tooled to have fewer nonplastics and a more regular wall thickness on single vessels and sherds. Once these type descriptions were developed, all Colono and Catawba sherds were laid out together and classified at the same time.

Spalling on pots was also noted. It seemed reasonable that such pots would have been discarded near where they were made if they showed no evidence of use. Unfortunately, some of the spalled pots did show evidence of having been cooked in, leaving a charred residue. Some sherds exhibited peeling on the exterior surface. This peeling of the top millimeter or two is not to be confused with spalling. The line between peeled and polished surfaces is straight, unlike the edges of a spall scar. The line does not follow the natural curve of the vessel as would be expected if the vessel were accidentally hit by a hard object. The overall shallowness of the peeled area and the straight line between peeled and polished surfaces suggests that a corrosive liquid was allowed to stand in the pot on a regular basis. This liquid seeped through the pot and eventually caused the exterior surface to flake off where it had alternately been wet and dry. Similar flaking is seen on sherds and vessels found in heavily saline soils in other areas. The unknown liquid may have been salty or high in other minerals. These sherds may represent chamber pots, and one rim sherd does have the appearance of a chamber pot rim (Figure 74).

Perhaps the most important find associated with the local manufacture of ceramics were two incompletely fired Colono sherds found at Site 38BK245. One of these could be termed unfired since it was so soft that a damp brush would have destroyed it during cleaning. Clay objects made of Colono clays were also found at the sites. These are listed in Table 32 and illustrated in Figure 76.

Table 32. Colono Objects

OBJECT	38BK75	38BK76	38BK245	TOTAL
Pipe Parts		8	4	12
Handle Parts		15	3	18
Marbles	1	4		5
Strainer Parts		3		3
Handle or Support Parts		1		1
Lid Knob		1		1
*Misc. Objects		4		4
Unfired Colono Sherds			2	2
Total	1	36	9	46

*Misc. Objects - finger marked lump of fired clay, lump of fired clay with many holes, small thin striated object, and flat, flaring object worn on edges.

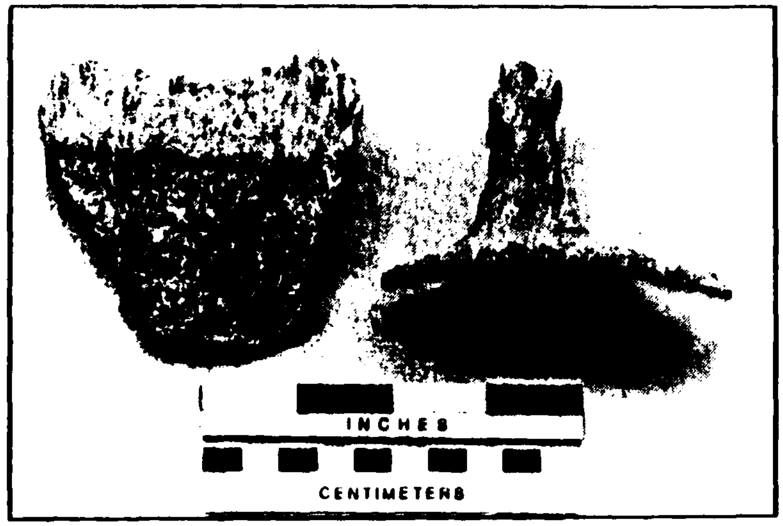
It should be noted that Colono pipe parts included short stems and bowls, and that these were fairly well made with a fine paste. Handles were crudely made and were oval to slightly flattened in cross section (Figure 76). These were assumed to be for jars or pots. None showed evidence of being inserted into the vessel wall like those of Catawba (Figure 77). Some may have been lug handles, but this was undeterminable in our sample. The objects identified as strainers (Figure 76) were flat thin pieces of fired clay, always with broken edges and holes perforated through them. These were crudely smoothed in two cases and well smoothed, but not polished, in one case. They may have represented strainers in teapots (Lewis and Haskell 1980:104) or simply strainers in the bottoms of bowls, as no clear indication of Colono teapots were found. One straight handle or possibly a support was found which had been faceted much like some pieces of Tooled Colono.* Four miscellaneous objects which have unknown functions were also found (Figure 76). A lump of fired clay which had been squeezed in a hand leaving finger marks may have represented a sample piece used to test the clay for firing properties. Another was a lump of clay with many deep holes gouged in it which morphologically resembles a child's attempt at making a pencil holder. A flat piece with ground edges resembled the base of a skirted figurine. The final object was very small and had incised or impressed parallel lines on it which may simply be from being pressed against a reed or piece of grass. These last four objects were probably not the sort of thing that would be marketable, which would tend to indicate that they were made on the site rather than being traded in from outside. The generally inconsistent quality of Colono would tend to make it less saleable than Catawba.

Our Catawba closely resembles the plain modern Catawba ceramics on display at the Charleston Museum in color and surface treatment. Colono and Catawba ceramics were discussed with Elaine Herold and Alan Lise during a visit to the museum in the fall of 1980. In the course of the discussion, Mr. Lise produced from storage a small, handled Catawba pitcher with "day-glo" red painted, wavy line and dot decoration (Figure 78). Although it was completely reduced, unlike the majority of our decorated Catawba material, the highly polished surface, thin walls, and decoration were unmistakable. This pitcher (Charleston Museum accession #ETN124) had been donated by David Doar, the great grandson of Dr. Samuel Cordes who, according to tradition, had bought it from a Catawba woman in St. Stephens in 1805. To our knowledge, this is the earliest attributable piece of Catawba on record and was bought by a man who at one time owned an interest in and occupied Yaughan plantation.

At all three sites and especially at the excavated portions of Site 38BK76, large deep features filled with alluviated soil and refuse had been excavated by the inhabitants. These features represented either intentional trash pits or clay extraction pits for construction or ceramic clay. That the slaves would intentionally dig trash pits while the more typical English pattern of refuse disposal seems to have been to leave trash on the surface (South 1977a:47) seems contradictory. The apparent squalor in which the slaves at Yaughan and Curriboo were forced to live, as illustrated by other data, including their artifact patterns, housing, and subsistence, also seems to contradict intentional trash pits in most cases.

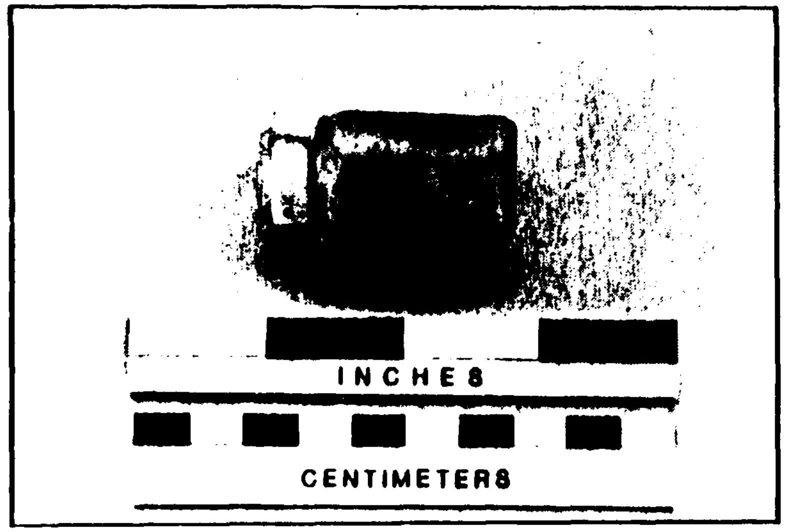
*In France, the Huguenots are known for, among other things, a marmite huguenote. According to the Nouveau Larousse Illustrè (n.d.) Volume 5, the marmite huguenote is a "marmite de terre sans pied ou avec des pieds, très bas. (Les huguenots, dit-on, se faissaient apporter leurs repas dans ces recipients, le jours d'assemblèe et de preche). Petit fourneau avec la marmite qu'il recoit". Loosely translated, the text reads, "earthenware pot with or without very short supports (feet). (The Huguenots, traditionally, carried their meals in these recipients on assembly and worship days). Small brazier with the pot it holds." If the support mentioned here is from a marmite huguenote or a copy of one, then there is a suggestion that some Huguenot culture may have been retained after 1740 and may be reflected in slave culture.

CATAWBA CERAMICS



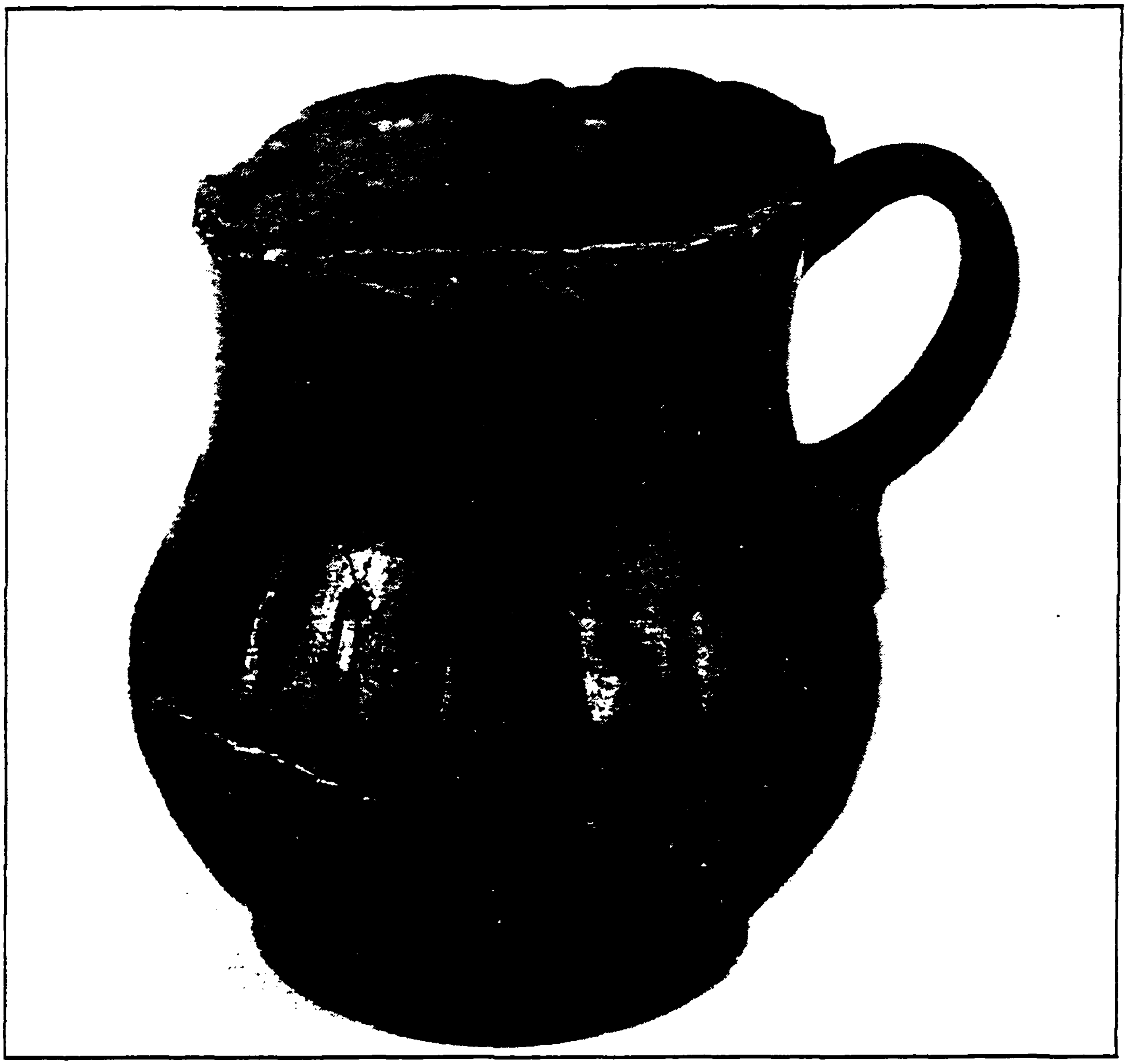
IRON KETTLE FRAGMENTS

OLIVE GREEN WINE BOTTLES
LEFT TO RIGHT - SAND PONTIL,
GLASS PONTIL, SAND PONTIL,
GLASS PONTIL



CLEAR GLASS "PERFUME" BOTTLE

FIGURE 77
Catawba and Other
Kitchen Group Artifacts



Photograph taken by
Charleston Museum

Approximately 3/4 scale

FIGURE 78
Catawba Pitcher

The following experiment was conducted in order to determine whether the clays at the sites could have been used for manufacturing Colono pottery. Nineteen soil samples were used from Sites 38BK76 and 38BK245. The samples from Site 38BK75 and naturally occurring soils at the other sites were fired in a kiln. All the samples, whether they were originally red or gray, became redder after being fired. The samples were fired for over eight hours at cone 06, which is undoubtedly a higher temperature and longer firing time than that undergone by colonoware. The oxidizing atmosphere assured complete oxidation of the samples which could be compared to oxidized pieces of Colono. Incomplete oxidation cannot allow objective comparisons of color for various reasons (Shepard 1964). Unfired clays changed from 10YR or 2.5Y to 5YR or even 2.5YR when fired; many also became only slightly lighter, but with more chroma, e.g. 7/2, 6/2, or 5/2 to 6/8 or 7/6. None of the fired samples were gray, although several of the unfired samples, especially from Structure 245B, were gray before firing.

Potting capability is a subjective term to denote those fired clays which appeared as hard or harder than Colono, did not crumble when broken, had the same or a finer texture than Colono in cross-section and did not crack in firing. Table 33 gives data on the 19 samples.

TABLE 33. Potential Potting Clays

Feature	Soil Texture	Original Color	Fired Color	Context	Potting Capability
76I-F24	C	10YR 5/3	2.5YR 6/8	trench	poor
245K-F1-2	C	7.5YR 6/8	2.5YR 5/8	kiln	excellent
245C-F4-1	SC	10YR 7/6	2.5YR 5-6/8	hearthpad	poor
245B-F11-7	C	2.5YR 6/4	5YR 7-6/6	trench	good
245B-F11-8	C	2.5YR 6/2	5YR 7/6	trench	good
245B-F11-11	C	10YR 5/2	5YR 7-6/6	trench	excellent
245B-F17	C	10YR 5/2	5YR 7/6	trench	excellent
245B-F11-18	C	2.5YR 7/2	5YR 7/6	trench	good
245B-F11-23	SC	10YR 7-6/3	5YR 7/6	trench	good
245B-F11-20	C	10YR 6/4	5YR 7/6	trench	good
245B-F11-26	C	10YR 6/3	5YR 7/6	trench	poor
245B-F11-29	C	10YR 6/2	5YR 7/6	trench	good
245-F18-2	C	10YR 5/3	5YR 7/6	posthole	good
245-F31-2	C	10YR 6/4	5YR 7/6	po_thole	good
245-F38	C	2.5Y 5/2	5YR 7-6/6	posthole	good
245-F41	C	10YR 7/3	5YR 7/6	posthole	good
245-F57-1	C	2.5Y 6/3	5YR 7/6	posthole	good
245-F58-1	C	10YR 6/4	5YR 7/6	posthole	good
245-F61	C	10YR 6/4	5Yr 7/6	trash pit	good

Despite the limitations imposed on the selection of samples and their relatively small number, it can be concluded that nearby, naturally occurring clays, which are virtually identical to Colonoware in texture and oxidized color, were available to the plantation inhabitants.

The lack of kilns, either of the subterranean variety or above ground type, and a similar lack of heavy charcoal concentrations at either plantation seems to argue against on-site manufacture of Colono. This may be a result of western preconceptions concerning pottery making. In the Southwest and in Mexico, among other places, ceramics are often fired above ground when only small quantities are required. This was also true of eighteenth century Barbados (Handler and Lange 1978:139-144). Charles Counts (personal communication 1981), a specialist in modern Yoruba pottery, noted similarities between our material and African forms, as did Henry Drewel (personal communication 1980). Counts further noted that a typical firing technique of local potters in Nigeria (of whom he has met well over 100) is to simply pile the greenware with the fuel on the surface of the ground. This fuel is often grass. Fagg and Picton (1978:11) also illustrate this firing technique in Nigeria.

The poorly fired pots of Colono usually had firing clouds and dark cores: these attributes, combined with the underfired or unfired sherds from Site 38BK245, would imply a short, poorly controlled firing as suggested by Counts and Fagg and Picton. Similar firing clouds and cores have also been produced by one of the authors using an open air, above ground firing technique. The absence of kilns cannot only be explained from ceramic evidence, but, considering the background of the potters and their economic and social condition, one should not expect to find formal kilns. A similar lack of heavy charcoal concentrations, indicating surface firing, should also be expected since relatively few vessels were probably made over the lifetime of the sites. Assuming an average total of 40 slaves at the peak of Colono production between 1740 and 1780 with a requirement of one bowl per person and three cooking pots for every five persons, and allowing for an average six month lifetime for the pots, approximately 128 pots would be needed every year. This could have been covered easily by six relatively small firings of 21 pots. The total result would be 240 firings of 21 pots each, over a 40 year period. Site 38BK76 covered approximately three acres, not including peripheral areas. Two hundred and forty firings placed in various parts of three or more acres over a period of 40 years could not be expected to leave heavy charcoal concentrations, especially if the fuel used was grass, the ashes of which would be blown around by winds and washed away in storms. In all stratigraphies, there were quantities of charcoal flecks fairly evenly mixed throughout the soils. This was at first thought to represent evidence of burning off of fields, but may have also represented wind blown deposits of ash from Colono firings and cooking fires.

The rounded bottoms of both the Colono pots and the bowls with practically no handles and blackened bottoms suggests that the cooking vessels were placed directly on the fire. Handler and Lange (1978:54) point out that slaves on Barbados preferred cooking in family groups and did so without permanent hearths or fireplaces. This may also be a common practice in Africa (Fagg and Picton 1978:17). In Mesoamerica and Barbados (Handler and Lange 1978:54), several, usually three, stones were placed on the ground upon which the cooking pot was set. If this was the case at Curriboo and Yaughan, then this may explain the absence of fireplaces and the presence of only one hearth (plus two possible hearths) at the plantations.

In Colonel Thomas Cordes' (1697?-1748/9) inventory at his death, his most expensive slave, at 400 L, was "1 Negro Man Named Potter" (or Porter) (Inventory of Col. Thomas Cordes 1748-1751). Since slaves with crafts were more expensive and slaves were occasionally named for their skill, there is a possibility that this slave represented a black potter or porter at either Curriboo or one of Thomas Cordes' holdings in St. John's Parish, Berkeley. That slaves traded other objects which they made, such as boats, chairs, baskets, and food, etc. to owners on their own and other plantations is established by historical research. There are no records of slaves trading Colono to owners, although there are records of owners buying Catawba ceramics. The similarities in the Colono at Yaughan and Curriboo, making them virtually indistinguishable, implies contact or even trade between the plantations. Although there was no conclusive proof of this (e.g. identical decoration at the two sites, signed pieces, trace mineral analysis, etc.) the opportunity was present and trade in other items was conducted.

Comparisons of the Curriboo and Yaughan material with that of other areas produced strong similarities with that illustrated by Drucker and Anthony (1979) and Anthony (1979) at Spiers Landing. Unfortunately, inspection of their collection was not possible. The Colono material in and near Charleston was found to be similar, but it tended to be more consistent in manufacture, better finished, and clearly had several European forms, e.g., teapots and plates (Charleston Museum collections; Lewis and Haskell 1980). From this a tentative hypothesis can be made that Colono-African pottery along the entire eastern seaboard will fall into one of two basic form groups: one on inland and more or less isolated plantations and a second in or near cities (i.e., Rural and Urban Colono). The first will have generalized and fewer forms for local use, and the second will have more forms with copies of European forms and will have been used for sale, perhaps even to whites.

To summarize this description of the unglazed earthenwares, several facts were established about such pottery from the literature cited above:

1. Forms of Colono in the West Indies were similar or identical to those at Yaughan and Curriboo plantations and elsewhere.

2. There were sites with Colono, notably in the West Indies, where there was no native ceramic tradition before the introduction of African slaves.

3. The European cultures at these same sites ranged from English to Dutch to French and other cultural backgrounds.

4. Native American Indians were making pottery for trade or sale to slaves and slave owners alike in Coastal South Carolina and elsewhere.

5. The Native American pottery varied from region to region and may have been attributable to known tribes.

6. Ceramics similar to Colono appeared late in the seventeenth century and died out in the first half of the nineteenth century.

7. Ceramics similar to Catawba appeared at least by the end of the eighteenth century in South Carolina and are still being made today.

From these observations, several conclusions can be drawn. The makers of Colono were either from the same or a similar cultural background or were in fairly constant contact with each other during the Colonial Period. The possible candidates for potters included Native Americans, one of several European groups, or African slaves.

In order to explain these facts, one of several conditions must obtain.

1. Native Americans with a common ceramic tradition shifted to making Colono in the late seventeenth century and proceeded to sell or trade their wares, produce them, or instruct others in their manufacture over an area including South Carolina and the West Indies, and perhaps farther. This is unlikely for various reasons. Regular trade or travel on so vast a scale across wide expanses of water by a group of Native Americans (outside of Mesoamerica) with a common ceramic tradition, to say nothing of interference by European interests in such movement, were highly improbable coincidences.

2. The second possible condition would involve a single European group or groups with a common cottage pottery industry, and with access to other European markets, making and trading Colono. The restrictions on trade between colonies of different European powers, however, would indicate that if such trade went on the risks to circumvent trade restrictions would be too great to justify trade in Colono when European ceramics were more or less readily available.

3. The third possible condition involves African slaves. In this case, Africans (including African potters) with similar ceramic traditions settled in the West Indies and on the mainland of North America. Using the resources at hand and being in poor economic straits, they produced colonoware. This would explain the similarities within colonoware ceramics, as well as the minor differences, the date of its appearance, the fact that it appears on sites with no prior native ceramic tradition, and that it occurs in areas controlled by various European powers. African slaves are the only common link tying together all of the known facts from the literature concerning this pottery at the present time.

Included within this last hypothesis is the possibility that native American or Indian slaves produced or instigated the production of slave-made pottery rather than African slaves. We feel this is highly unlikely for the following reasons, summarized from the historic research and archaeological evidence:

1. According to current historical investigations on the subject, Indian slaves were never more than 25-30 percent of the slave population of South Carolina.

2. Indian slavery peaked by 1710 or so and was in rapid decline towards insignificance by 1730.

3. The impact of Indian slaves on other aspects of plantation culture has been shown to have been insignificant.

4. The slave population began to show significant growth after 1711 with the introduction of large numbers of imported African slaves.

5. Yaughan and Curriboo were settled after 1740 and have no definite Indian slaves appearing in the records.

6. The Santee River area was virtually depopulated of free Indians before European settlement of the region.

7. The Colono at Yaughan and Curriboo appears to have much stronger ties to with strictly slave sites than with known Colono-Indian ceramics.

It has been concluded on a general level that some slaves made and used their own ceramics and that Indian slaves probably played little or no role in Colono manufacture. On specific regional levels, it is also apparent that different free Indian groups made ceramics for their own use and for trade or sale. On a local level, two types of ceramics, Colono and Catawba, occurred on the plantations. Based on evidence presented in the type description and the general conclusions reached from the ceramic and historical literature, It can be concluded that Colono was made by and for slaves and Catawba was made by Indians for sale or trade.

In summary, the unglazed earthenwares at Yaughan and Curriboo were divided into two types, Colono and Catawba. Colono was divided into two varieties, Tooled and Smoothed. It consisted mainly of bowls and pots, but was also found in the form of pipes, marbles, and other objects. Catawba showed affinities to attributable Catawba Indian ceramics, while the evidence suggests that Colono was made on the plantations.

With this description, the unglazed earthenware ceramics can be analyzed in comparison to other artifact categories which may shed light on the character of the occupations at Curriboo and Yaughan. Slave-made Colono was the majority type at both plantations and all three sites. Not only did it make up over 85 percent of the unglazed and glazed ceramics (Table 34), but it made up over 66 percent of all artifacts at 38BK76 and 56 percent of all artifacts at 38BK245. At Site 38BK75, Colono made up 38 percent of the total artifact assemblage. Not only was Colono the majority ceramic type, it was the majority artifact type at the earlier sites and made up a substantial percentage of the artifacts at a later site.

Table 34
Colono/Catawba and Nonlocal Ceramics

	Colono		Catawba		Nonlocal		Total
38BK75	2545	65.90	295	7.64	1022	26.46	3862
38BK76	15043	89.48	141	.84	1627	9.68	16811
38BK245	3316	87.77	17	.45	445	11.78	3778
TOTAL	20904	85.49	453	1.85	3095	12.65	24451

Table 35 presents the quantities and relative frequencies of Colono, Catawba, and nonlocal ceramics of 38BK75, 38BK245, and 38BK76, Structures 76A and 76B. The structures at 38BK76 were used as separate sites or units since both had been hand excavated, were fairly far apart (which lessened the chance of contamination), had sizeable quantities of artifacts, and provided more sites or units for seriation. Figure 79 presents in graphic form the relative frequencies presented in Table 35. It can be readily noted that Colono decreased from 38BK76A to 38BK75, and that there were more dramatic increases in Catawba and nonlocal ceramics. Generally, these trends follow time from early to late. That Site 38BK245 is out of sequence with respect to time is considered in some detail in Chapter XII. The main concern here is with the general trend of decreasing Colono and increasing amounts of Catawba and especially nonlocal ceramics over time.

The rim/vessel forms used in the following comparisons corresponded to the restorable vessels and to forms illustrated in the literature. The open incurving form equates with rounded bowls, closed incurving with deep rounded bowls; outcurving with cooking pots and jars, and outsloping with straight-sided flat bottomed bowls as found in Catawba and very infrequently in Colono. For the purposes of comparison with nonlocal ceramics, these form types were collapsed into bowls and cooking/storage pots. Nonlocal ceramic rims were divided into flatware, bowls/cups (to include clearly defined bowls and cups as well as vessels which could be either), and other forms such as storage or cooking vessels. Nonlocal rims represented 13 percent of the total nonlocal ceramics on an average. Colono rims represented slightly less of the total Colono sherds (10 percent), but these percentages were close enough so that comparisons of rims could be assumed to represent the two populations of sherds.

The relative proportions of Colono bowls and pots change with respect to each other and to the wider variety of forms in nonlocal ceramics, especially bowls and plates. Statistically, these shifts have proven significant. This discussion of form is based upon analysis of all Colono, Catawba, and non-local rim sherds. A minimum vessel count of the nonlocal ceramics was completed but could not be compared to Colono since a minimum vessel count of Colono was not conducted. This was because of the irregular nature of Colono which made clear identification of minimum vessels difficult and because of limited time.

Table 36 presents the various major form categories within Colono and non-local ceramics. Figure 80 graphically represents the relative frequencies given in Table 36. The position of Site 38BK245 with respect to time is better illustrated here than in Figure 79, although it is very similar to 38BK76B. Essentially, the sites are seriated from the earliest at the bottom to the latest at the top of the figure.

Correlation coefficients were taken of pairs of forms to determine if the trends noted in Figure 80 were strong and whether or not they were significant. Comparing the following pairs of form categories produced the accompanying $\underline{r}$ values (Table 37).

TABLE 35. Nonlocal and Local Ceramic Totals

	Colono		Catawba		Non-local		Total
38BK75	2545	65.90	295	7.64	1022	26.46	3862
38BK76B	6762	89.71	85	1.13	691	9.17	7538
38BK245	3316	87.77	17	.45	445	11.78	3778
38BK76A	4586	97.76	32	.68	173	3.69	4691

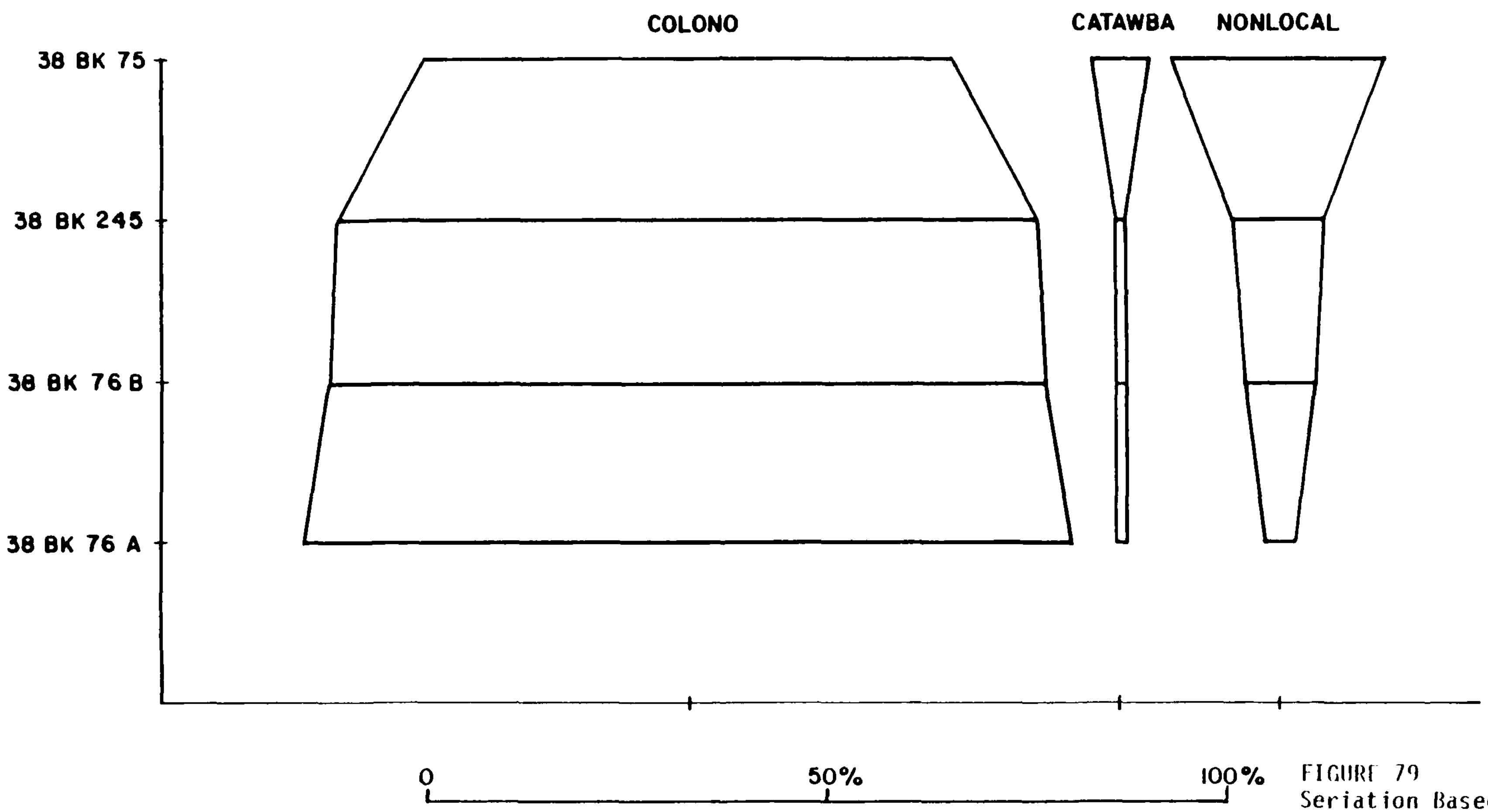


FIGURE 79
Seriation Based on
Nonlocal and Local
Ceramics

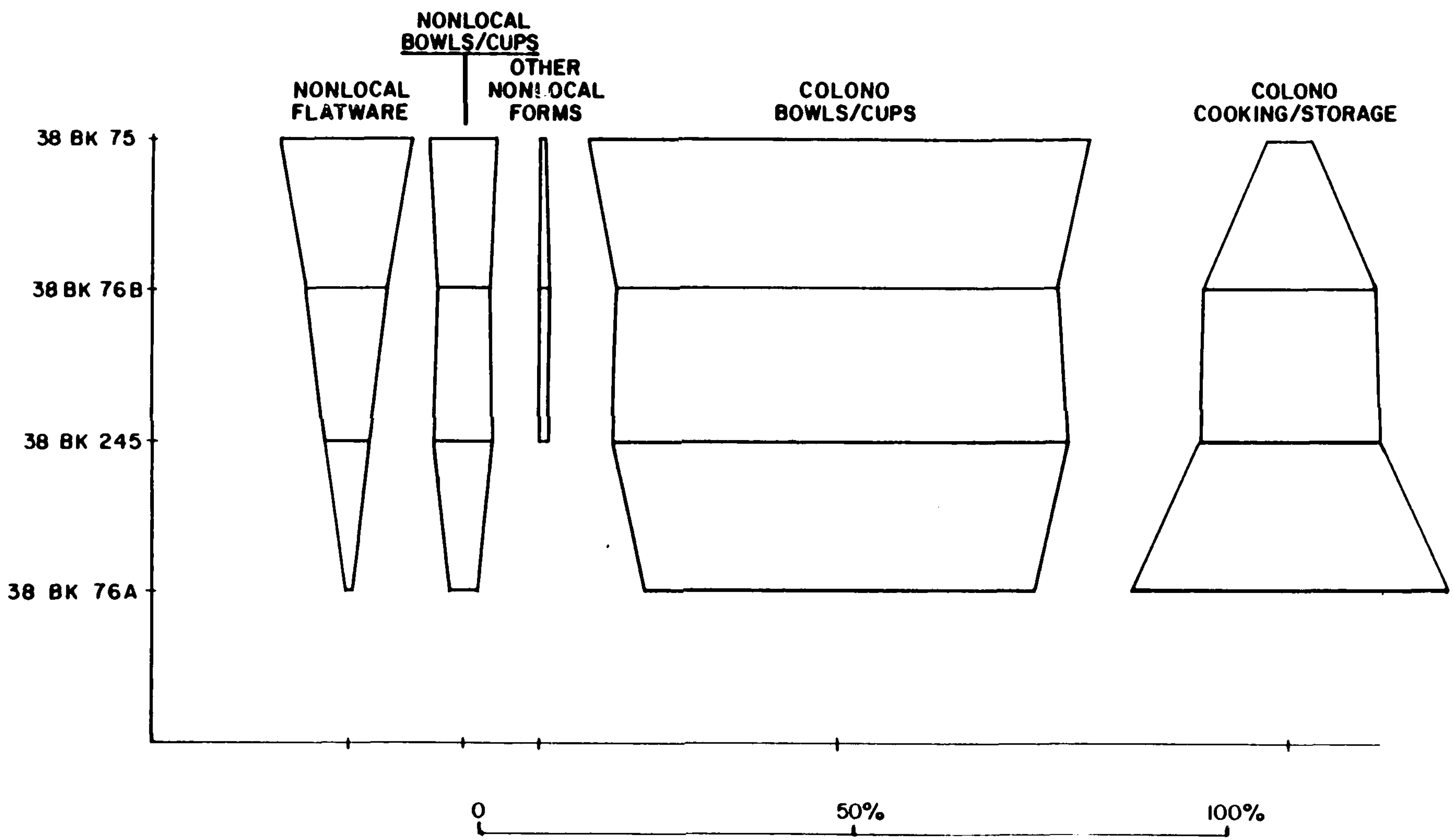


FIGURE 80
Seriation Based on
Rim Counts

TABLE 36. Ceramic Rim Counts

	Non-local						Colono				
	Flatware		Bowls/Cups		Other		Bowls/Cups		Cooking/Storage		Total
38BK75	89	17.69	45	8.95	1	.20	339	67.40	29	5.77	503
38BK76B	73	10.41	50	7.13	2	.29	415	59.20	161	22.97	701
38BK245	20	5.90	27	7.96	2	.59	209	61.65	81	23.89	339
38BK76A	3	.76	15	3.79	0	0	212	53.54	166	41.92	396

TABLE 37
Correlation Coefficients of Pairs of Forms
(d.f. = 2)

Nonlocal Flatware vs. Nonlocal Bowls/Cups	r = +.8447	p = .155
Nonlocal Flatware vs. Colono Bowls/Cups	r = +.9038	p = .086
Nonlocal Flatware vs. Colono Cooking/Storage	r = -.9674	p = .033
Nonlocal Bowls/Cups vs. Colono Bowls/Cups	r = +.9515	p = .048
Nonlocal Bowls/Cups vs. Colono Cooking/Storage	r = -.9415	p = .059
Colono Bowls/Cups vs. Colono Cooking Storage	r = -9798	p =- .020

All of the correlations were strong and three had a probability of less than .05. The three significant correlations were a negative correlation of nonlocal flatware and Colono cooking/storage forms, a positive correlation of nonlocal and Colono bowls and cups, and a negative correlation of Colono bowls/cups and cooking/storage forms. The general trends in time, as shown in Figures 79 and 80, led to the general conclusion that Colono cooking/storage forms decreased as nonlocal flatware and Colono bowls/cups increased and that Colono and nonlocal bowls/cups increased over time.

With the exception of the stripped area at 38BK245, the other areas seriated according to their mean ceramic dates: 38BK76A dates to 1773.4, 38BK76B to 1787.6, and 38BK75B to 1789.8. The stripped area at 38BK245 (38BK245AB) dated to 1760.5 which should place it as the earliest site, earlier than 38BK76A and 38BK76B, as is shown on Figure 72. Since the mean ceramic dates and documentary evidence support an early to late sequence of 38BK245AB, 38BK76A, 38BK76B to 38BK75B, and the general trend of forms follows nearly the same order, these trends covary, at least generally, with time. The anomaly of 38BK245AB may be explained as a status rather than temporal difference. If Site 38BK245 represented slaves who were better off materially than those at 38BK75 and 38BK76, then the process of increasing flatware and bowls/cups and decreasing cooking/storage forms should have occurred earlier at 38BK245, resulting in a seemingly later position in a seriation.

Chemical analysis of charred remains in cooking pots was not allowed for in this project. Hopefully, future researchers will deal with this material. However, the residual remains in the pots indicate that they were used for cooking and that on occasion the food was allowed to burn. Such pots could not be used for frying or roasting and apparently they were principally used for boiling soups or stews. The presence of round bottomed bowls with fairly steep sides, while considered to be all purpose vessels, could most easily be used for holding individual portions of liquid or semi-liquid foods. The absence of knife marks (Griffiths 1978) on the interiors, while possibly the result of difficulties in analysis (small sherd size, erosion, determination of position on vessel, etc.) appeared to indicate that the bowls were not used for cutting surfaces. The conclusion to be reached is that the slaves at Site 38BK76 in the earlier period were probably cooking stews in small pots and eating from bowls, and that their diet did not contain large pieces of meat cut with a knife and fork. Such a cooking method and its implications for diet, although perhaps monotonous, would have been relatively easy for slaves working in the fields all day. It had the further advantage of allowing adult slaves to let the food simmer and be tended by children or the elderly. The small cooking pots also argue against centralized cooking since only small quantities could be cooked at any one time.

Because of the durability of iron kettles, their presence in the archaeological record is lower than it would be if they had not been so durable and valuable, i.e. kettles would tend not to break in the first place and those that did would not break into many pieces. It is also probable that useable kettles were carried away when the sites were abandoned. In such a case, one should expect evidence of fewer kettles in the archaeological record than were present originally. Assuming that these two factors played equal roles at all sites, then the relative frequencies, supported by a fairly strong r value on Table 38, strongly suggest that kettles were replacing Colono cooking pots by the end of the eighteenth century.

In summary, two types of colonoware ceramics were differentiated: these were Colono-African (Colono) and Colono-Indian (Catawba). There is evidence that Colono was produced at Yaughan and Curriboo. This evidence includes a variety of skill levels apparent in the ceramic material, local clays which compare favorably with Colono, clay extraction pits, apparently unmarketable Colono items, and unfired sherds. Colono occurred in generally the same forms and finishes, not only at Yaughan and Curriboo, but at other sites in the vicinity and region. Catawba was similar to pieces directly attributable to modern Catawba groups and to the earliest documented Catawba pot, which was bought by Samuel Cordes at Yaughan in 1805. It was therefore concluded that Colono was made and used on the plantations and that Catawba was made by Indians, primarily for sale or trade. Further, the similarities between our material, especially in form, with ceramics in Barbados and Africa led to the conclusion that African slaves made Colono.

TABLE 38. Kettle Fragments and Colono Cooking/Storage Forms

	Kettles		Pots		Total
38BK75	8	21.62	29	78.38	37
38BK76A	4	2.35	166	97.65	170
38BK76B	3	1.83	161	98.17	164
38BK245	3	3.57	81	96.43	84

Correlation Coefficient

r = -.7290

p = .271

d.f. = 2

An interesting sidelight and avenue for further research, as a result of differentiating Catawba and Colono, involves culture change among the Catawba Indians. During early contact with the Anglo-American colonists, historic accounts speak of treating with Indians as a separate nation. Contacts were primarily for fur and slave trading, and among the Catawba only the males and tribal leaders had much contact with Anglo-American traders and political leaders. This changed in the early to mid-1700s so that by 1780, most accounts of contact with the Catawba were of Indian women travelling to Charleston trading craft goods, including ceramics (Hudson 1956:144-149). This is supported archaeologically at Yaughan and Curriboo by the appearance of Catawba ceramics at about the same time. The question of culture change is therefore raised: does the appearance of Catawba indicate culture change within a native American population?

Bottle Glass

Most of the remainder of the material which made up the Kitchen Group was bottle glass. Bottle glass was divided into seven categories originally; these were olive wine bottle, bluish olive wine bottle, other olive bottle, clear, green tinted, amethyst, and "other". Only one piece of amethyst glass (which post-dated the slave occupation) was found at Site 38BK75 and the "other" category had none. For the purposes at hand, all olive green glass was lumped together and listed by site with the other types (Table 39).

TABLE 39. Bottle Glass Varieties

	38BK75		38BK76		38BK245	
	#	%	#	%	#	%
Olive Glass	425	76.44	1680	85.63	654	94.92
Clear Glass	68	12.23	164	8.36	23	3.34
Green Tinted Glass	63	11.33	118	6.01	12	1.74
Total	556		1962		685	

Most of the olive green glass consisted of wine bottle fragments (Figure 77). The clear and green tinted glass generally represented small items, mostly pharmaceutical bottles, tumblers, or stemmed glasses.

There was one example of a ground and faceted clear glass bottle recovered from Feature F2 at 38BK76 near Structures 76D and 76M, which probably had a glass stopper. This may have been used for perfume. Four reconstructable olive green wine bottles were recovered from Feature F8 near Structure 76E. Based on form, push ups, and pontil marks, two bottles were determined likely to be of English manufacture and two of French manufacture (Jones 1971, Douglas and Frank 1972). These have already been discussed in context under the discussion of the ceramic to glass ratio at Site 38BK76 in Chapter VII.

The bottle glass was then divided into minimum vessels, primarily on the basis of color under the assumption that only rarely would two bottles have exactly the same color and, therefore, chemical makeup. Color was determined by comparing all sherds from associated proveniences using a light table. Under such conditions, even the most opaque olive green glass gives a distinctive color. However, especially thick olive green glass may produce a darker color than thinner sherds although the quality (i.e. chroma) may be recognizable; for this reason, the following minimum vessel count may not be more than 95 percent certain (Table 40).

TABLE 40. Glass Minimum Vessels

	38BK75			38BK76			38BK245		
	Olive	Clear	Green Tinted	Olive	Clear	Green Tinted	Olive	Clear	Green Tinted
Wine bottle	19			73			44		
Case bottle	6			7	3		1		
Medicine bottle		3	2		2	5			
Unidentifiable bottle	1	4	5	2	7	1		4	4
Perfume bottle					1				
Stemmed glass		10			11			4	
Tumbler		3			3				
Pressed glass					2				
Total	26	20	7	82	29	6	45	8	4

Sites 38BK76 and 38BK245 contained relatively more olive green glass than 38BK75. This may be a reflection of the increasing use of green tinted and clear glass over time. Further, there was an indication that 38BK76 and 38BK245 had proportionally higher amounts of liquor bottles to medicine bottles or drinking glasses than 38BK75. Since this might be an indication of slave of status overtime, the material was grouped (Table 41) to illustrate the differences between the three major forms.

TABLE 41. Major Glass Forms
as a Percentage of Glass Artifacts

	38BK75		38BK76		38BK245	
	#	%	#	%	#	%
Liquor bottles	25	58.14	83	79.81	45	91.84
Medicine bottles	5	11.63	7	6.73	0	
Glasses	13	30.23	14	13.46	4	8.16
Total	43		104			49

This table more clearly shows the difference in relative "popularity" of the three functional categories. However, since the percentages reflected popularity only within glass at each site, liquor bottles appeared to be more popular at Site 38BK76 and 38BK245 than at 38BK75. The following chart (Table 42) puts the forms into perspective by taking them as a percentage of the overall artifact count, using minimum vessel counts.

TABLE 42. Major Glass Forms
as a Percentage of Total Artifacts

	38BK75		38BK76		38BK245	
	#	%	#	%	#	%
Liquor	25	.39	83	.41	45	.92
Medicine	5	.08	7	.03	0	.00
Glasses	13	.20	14	.07	4	.08
Total Artifacts	6689		22666		5942	

Table 43 shows that as a proportion of the total number of artifacts, liquor bottles were more frequent at 38BK245 than at either of the other two sites; Sites 38BK76 and 38BK76 had approximately the same proportion of wine and case bottles; and Site 38BK76 had more medicine bottles and glasses than either 38BK76 or 38BK245.

Site 38BK76 was hypothesized to be the most recent site and as such its inhabitants should have been the most acculturated into Anglo-American culture; therefore, it should follow that the site had a higher proportion of European items such as drinking glasses. This appeared to be the case since 38BK76 had over twice the amount of drinking glasses than were found at the two earlier sites.

Gun Parts

Gun parts are discussed here since it has been thought by some archaeologists (Fairbanks 1972:84 and Otto 1975:354) that slave access to guns was nonexistent. As will be shown below, this was not the case at Curriboo and Yaughan. A total of 33 arms group artifacts were recovered during the fieldwork (Table 43), more specimens than appear in drinking glasses, for example. The gun parts represented one brass trigger guard from the surface at 38BK76 and a rifle or musket barrel from Feature F3 at 38BK245. The gun barrel was X-rayed and the inside diameter was determined to be .625 caliber. This was too large for the average American Revolutionary period rifle, but was almost ideal for the French Charleville rifle (Ferguson 1978:66).

TABLE 43. Gun Parts and Associated Artifacts

	Gunspalls	Gunflints	Shot	Musketballs	Gun Parts	Site Total
38BK75	1		9	1	0	11
38BK76		2	1	1	1	5
38BK245	8		3	5	1	17
Total	9	2	13	7	2	

The gunspalls were irregularly shaped gray or gray-brown chert, usually with a bulb of percussion and secondary retouch. Gunflints were well made of honey colored flint. Their shape and manufacture closely followed that described by Stone (1970:21, type SAT1).

The lead shot were small, B-B size or smaller buckshot, undoubtedly used in shotguns. The musketballs, on the other hand, were large, lead balls, usually flattened from impact, used for hunting larger game. Four of the specimens noted for 38BK245 were given to IAS-Atlanta by construction workers who claimed the balls came from the site. These four examples were imbedded in a soil matrix in a British Brown stoneware jug which has been partially restored.

The gun parts at Site 38BK75 were mainly found in Features F27 and F29, with very few being found during excavation or on the surface. At 38BK76, none of the Arms Group artifacts were found in features, and the most spectacular artifact, the trigger guard, was found on the surface. At 38BK245, the Arms Group artifacts were fairly evenly divided between feature and nonfeature contexts. This may imply that such artifacts played a stronger role at 38BK75 and 38BK245 where there were enough such artifacts for them to be deliberately discarded in features.

If it is assumed that firearms were used primarily for hunting on the plantations, one should expect to find evidence of wild fauna being consumed either in the slave quarters, or the overseer's or owner's house. There was minimal evidence for a wild animal diet at 38BK75 and 38BK76, 1.97 grams of goose bone and 6.5 grams of deer bone at 38BK75 and none at 38BK76. At 38BK245, there were 1.64 grams of opossum bone. All of the remaining bone or shell was from freshwater fish, clams, oysters, and domestic mammals. Hunting apparently played little part in the slave diet. The conclusion drawn from this is that if the presence of firearms reflected hunting by slaves, then their catch was probably consumed by the overseers or owners; this is similar to the conclusion arrived at by Otto for St. Simons (Otto 1975:287-356). Firearms may also have been used by slaves to chase off animal pests in the fields.

Tobacco Pipe Group

Two major types of tobacco pipes were present at the sites and may have reflected slave lifeways. These include "ball clay" pipes, and Colono pipes, made of the same clays as Colonoware ceramics.

The "ball clay" pipes generally exhibited little decoration. At Site 38BK75, identifiable stamped initials included an impressed "TD" bowl with "WG" on the spur and a raised "S" on another spur. According to Iain Walker (1967:76), the "S" was a Dutch mark for the lowest quality pipe and is no earlier than 1739-40. "TD" pipes were eighteenth to early nineteenth century and do not help analysis of the sites beyond confirming their general age. Site 38BK76 had four impressed "TD" bowls and two raised "TD" spurs. This site also had a raised "WG" on a spur, "MON" or "HON" on a bowl, and a raised "RT" on another bowl. The "WG" also appeared at Fort Michilimackinac between 1715 and 1781 (Peterson 1963). According to Petersen, the "RT" stands for Robert Tippet of Bristol, 1680-1740, and this pipe may have represented one of the earlier pipe fragments. The "HON" or "MON" bowl may have been a portion of a slogan such as Dieu et mon Droit or Honi soit qui mal y pense, implying British manufacture between 1730 and 1770 (Noel-Hume 1978:Figure 97). Site 38BK245 was represented by a "TD" bowl, a "TD" spur, a "WG" spur, and a "W" or "V" bowl, perhaps originally a "WG".

Decoration on pipes included fluting, rouletting around the rim, an incised line around the rim, and impressed or stamped leaves on the bowl. Two pipe fragments exhibited glaze; these were a brown glazed pipestem end at Site 38BK76, Feature F8, and a green glazed bowl fragment at 38BK245, Feature F12. Noel-Hume (1978:302) notes that this was an uncommon practice in the eighteenth century.

A more direct link between status and pipes may be the use and reuse of pipes. Wear marks on pipe stems caused by teeth or deliberate carving of the pipestem occurred only at Site 38BK76. The pipestems were examined for tooth marks (sometimes stems were nearly worn in two) and carved stems which would have allowed broken stems to take a reed extension, prolonging the life of the pipe. Note was also made of the co-occurrence of original or broken stem tips. Table 44 was compiled from excavated material.

TABLE 44. Modified Pipe Tips at Site 38BK76

	Worn Original Tips	Worn Broken Tips	Carved Broken Tips
Structure 76A	1	3	
Structure 76B	1	13	2
38BK76		1	2
Total	2	17	4

Few of the toothmarks were on original stems and the vast majority were on broken stems. This illustrated long use of pipes and reuse of broken pipes, which did not occur at Sites 38BK75 and 38BK245. The implication is that the slaves at 38BK76, and especially at Structure 76B, could not afford or were not supplied with enough pipes to meet the demand. If this had happened at only one structure, it could be considered an idiosyncracy of a single slave; that it happened across the site implies that the slaves at 38BK76 did not have as ready access to pipes as they did at 38BK75 and 38BK245.

For slave sites, the relative amounts of stems to bowls may also be indicative of use and discard. It is hypothesized that in the Anglo-American culture, a broken pipestem past a certain point would be cause for discard of the entire pipe more often than it would be with slaves, and that slaves would continue to use the pipe until the stem was only an inch or two long. In the archaeological record, this would result in more stem/bowl and bowl fragments relative to stems on Anglo-American sites, and more stem fragments relative to stem/bowl and bowl fragments on slave sites. This is hypothesized to be so, since a pipe broken only once and discarded would result in fewer and larger stem fragments while a pipe used despite repeated breakage would produce more and smaller stem fragments. Subsequent breakage after discard would tend to blur this data, though. Since no Anglo-American sites were excavated at the plantations, only slave sites could be compared, and the hypothesis changed to fit the circumstances. It was therefore hypothesized that as economic conditions improved at a plantation and pipes became increasingly less expensive, a pattern similar to the Anglo-American slave process would be evident in the pipe stem proportions, i.e. at Site 38BK76, pipe stems would be relatively more common than at Site 38BK245 and Site 38BK75. Data are presented in Table 45 for examination this hypothesis.

TABLE 45. Tobacco Pipe Stems and Bowls
from Excavated Contexts Only

	Stems		Stem/Bowls		Bowls		Site Total
38BK75	89	74.17%	9	7.50%	22	18.33%	120
38BK76	417	88.16%	35	7.40%	21	4.44%	473
38BK245	192	83.48%	23	10.00%	15	6.52%	230
Totals	698		67		58		823

If the stem/bowl category is added to bowls, the following results.

	Stems and Stem Bowls		Bowls		Total
38BK75	89	74.17%	31	25.83%	120
38BK76	417	88.16%	56	11.84%	473
38BK245	192	83.48%	38	16.52%	230
r= .9993					
.05 p .01					
Totals	698		125		823

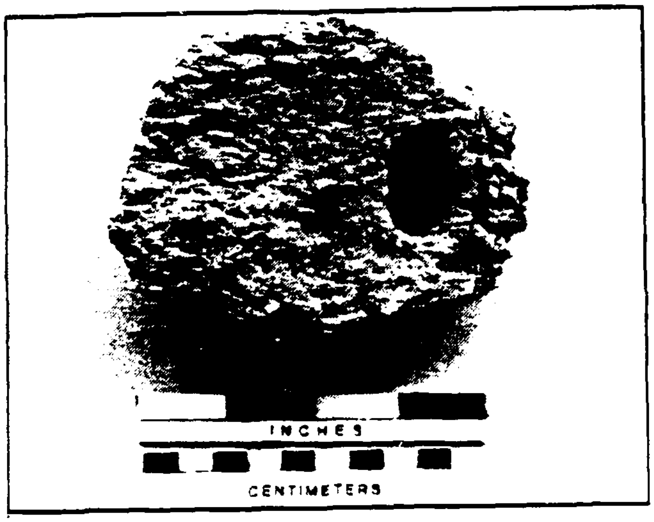
There did appear to be a trend from more stems at 38BK76 to fewer at 38BK245 and 38BK75. A correlation coefficient was derived to test the strength of this trend and it was significant. With comparable samples from Anglo-American sites, such a correlation may prove useful in establishing status and interplay between pipe users and their overall material culture.

A further indication that slaves may have had more access to ball clay pipes during later periods is the presence of colonoware pipe fragments. Site 38BK76 had eight pipe fragments, and Site 38BK245 had four. These represented 1.06 percent and 1.29 percent of the pipes at the respective sites. To our knowledge, Colonoware pipe fragments have not been found on strictly Anglo-American sites.

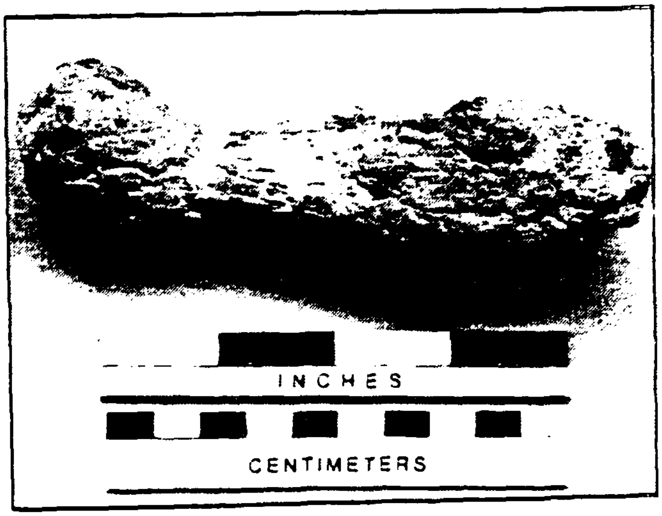
Activities Group

Clasp knives were the largest single category of metal Activities Group artifacts (Figure 81). Four typical examples are illustrated in Figure 82. Site 38BK76 had the highest number of clasp knives with 13, and 38BK75 and 38BK245 had 8 and 10, respectively. Such knives were apparently found useful and necessary by the slave inhabitants and may illustrate one of the items for which slaves traded goods with their owners.

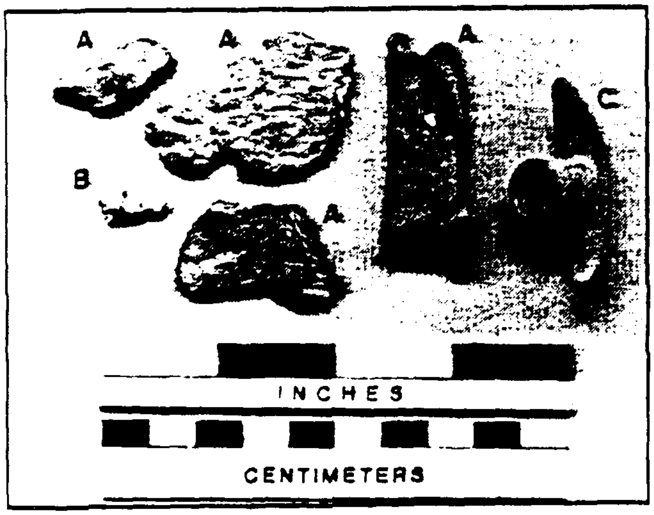
The hoes (Figure 83) were analyzed for their functional category using data provided by Egloff (1982). The categories were based on the angle of the hoe and the length to width ratio. According to Egloff (1980), hoes with an angle of 73° or smaller were used for weeding, 77° for hilling or planting, and 83° for grubbing or soil preparation. The height/width ratio divided hoes into broad or narrow. All of the measurable hoes were broad. Included with the hoes was a two-pronged hoe from Site 38BK245, which had an unknown special function. There were six measurable examples of weeding hoes and one each of hilling and grubbing hoes. The following table gives a breakdown of hoes by site.



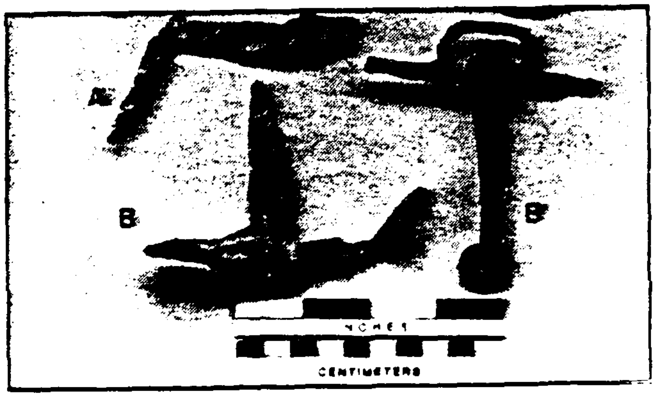
PADLOCK



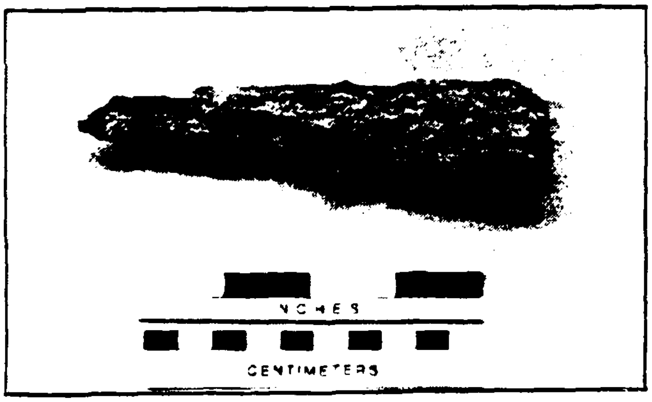
BONE HANDLED CLASP KNIFE



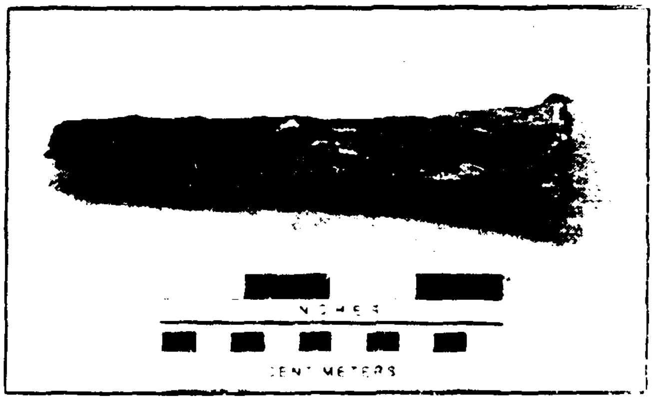
A · FLAT LEAD
B -MOLDED LEAD OBJECT
C -BRASS MACHINE HANDLE



A - SICKLE BLADE
B - HORSE BITS



CHISEL



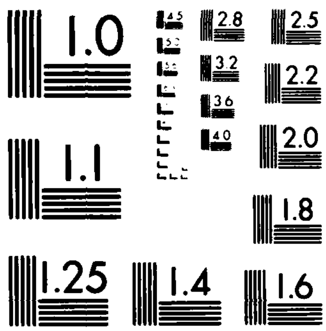
CHISEL

FIGURE [illegible]
Activity Group Artifacts

AD-A148 985 YAUGHAN AND CURRIBOO PLANTATIONS: STUDIES IN AFRO-AMERICAN ARCHAEOLOGY(U) SOIL SYSTEMS INC MARIETTA GA T R WHEATON ET AL. APR 83 CX-5000-9-5950

4/6

UNCLASSIFIED F/G 5/6 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

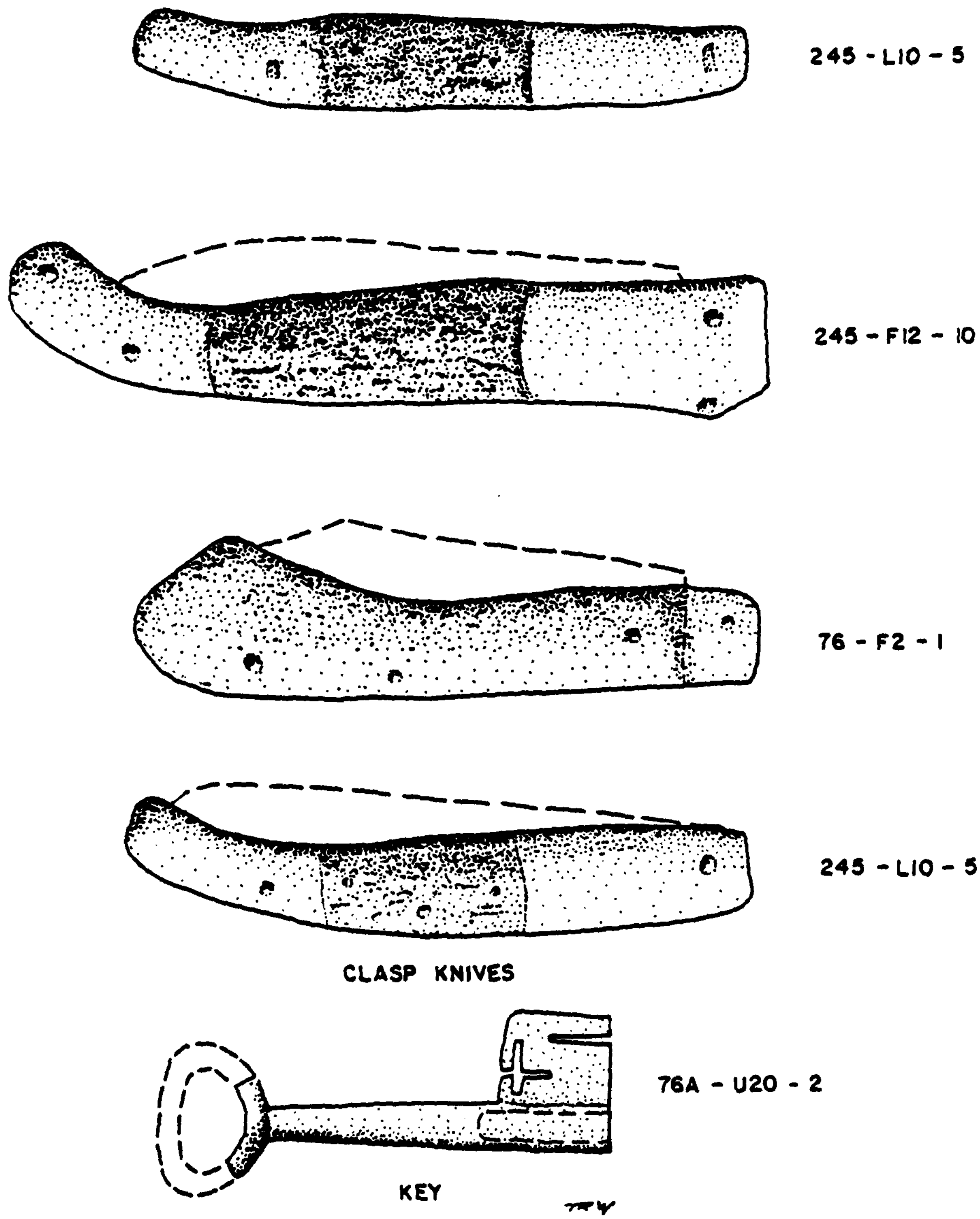
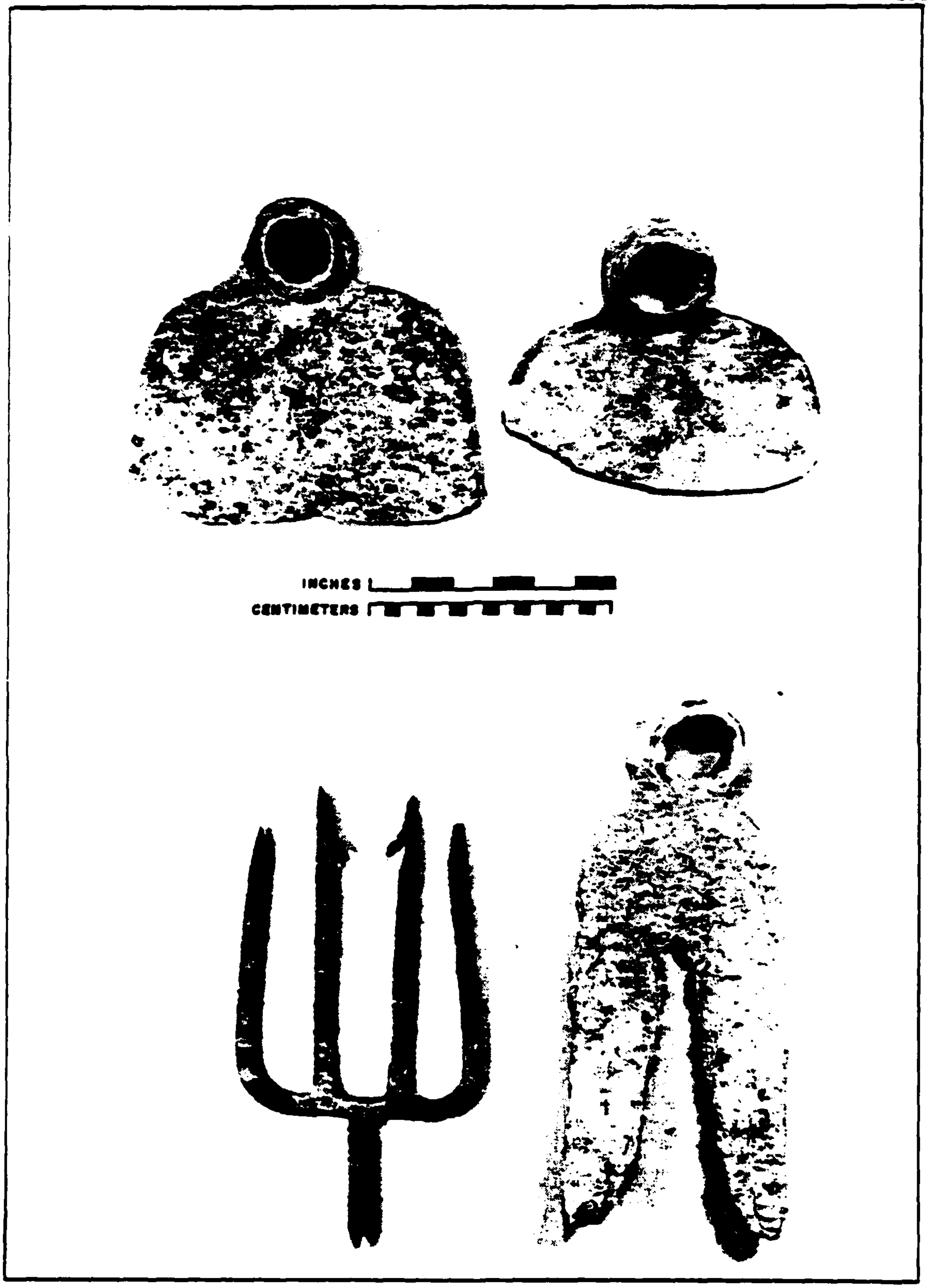
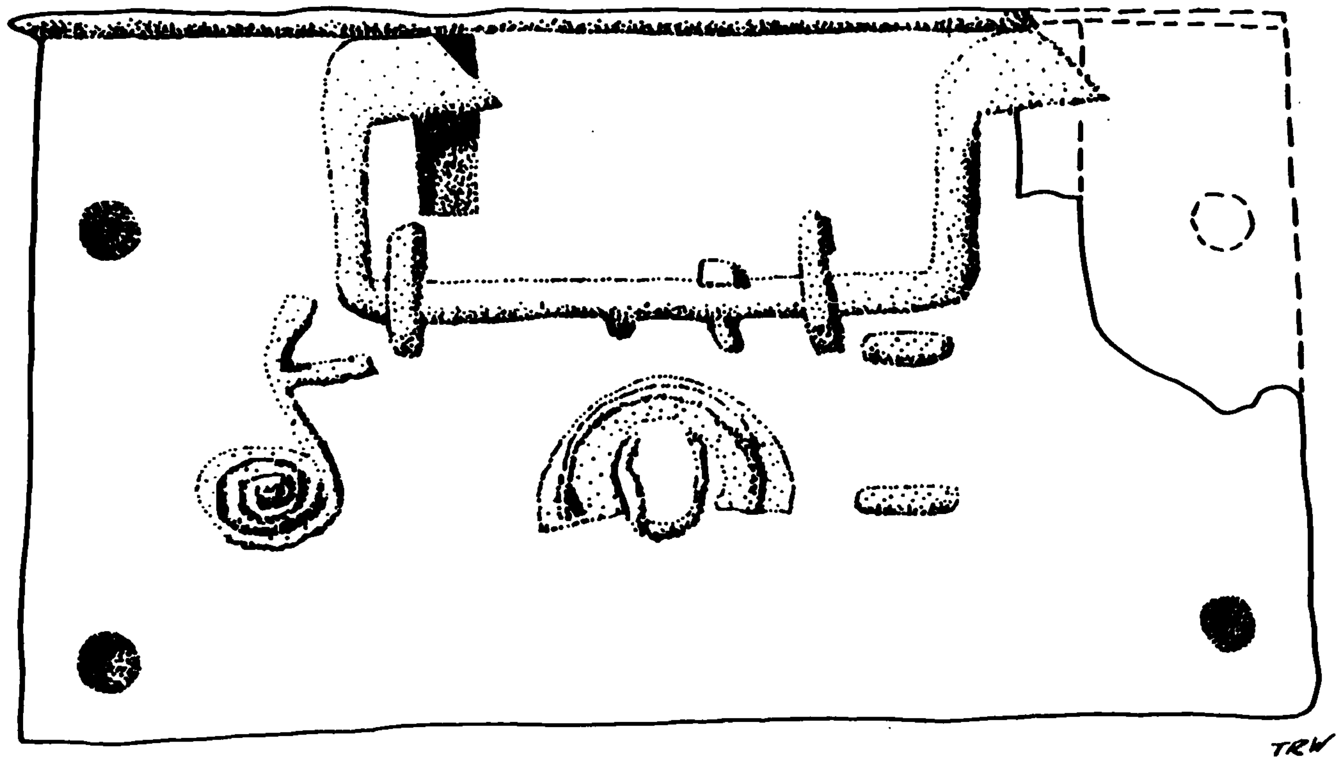


FIGURE 82
Assorted Metal Objects
Identified by X-Ray



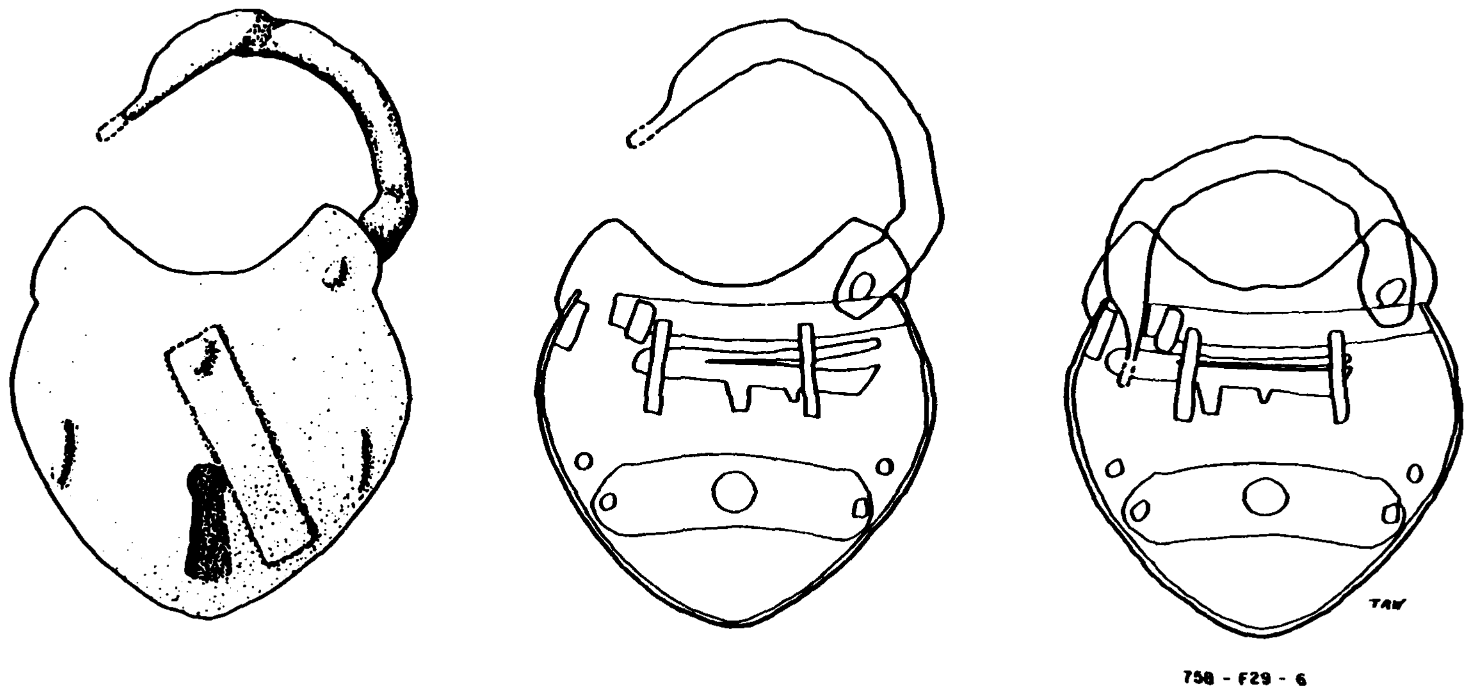
TOP - 2 BROAD HOES
BOTTOM LEFT - FROG GIG
BOTTOM RIGHT - TWO PRONGED HOE

FIGURE 83
Activity Group Artifacts



Actual Size

FIGURE 84
Chest Lock
Workings Determined
by X-Ray



65 % Actual Size

FIGURE 85
Padlock
Workings Determined
by X-Ray

TABLE 46. Measurable Hoes

	Weeding	Hilling	Grubbing	Two-prong	Fragment	Total
Average Height/ Width	1:1.6	1:1.6	1:1.6			
Angle	73°	77°	83°			
Site						
38BK75	3	2	1		1	7
38BK76	3					3
38BK245	2	1		1		4
Total	8	3	1	1	1	14

As would be expected at plantations producing cotton and indigo, the weeding hoes outnumbered the other hoes at all three sites. Only one sickle blade fragment was recovered from Site 38BK245 (Figure 81), probably representing rice or grain harvesting activities at the site.

The evidence for non-farm tools (Figure 81) in the slave quarters was slight. Overall such tools accounted for nine artifacts at all three sites or .03 percent of all artifacts. These tools included two chisels and a hoof knife or sickle blade at 38BK245; two wood rasps, one at 38BK76 and one at 38BK245; a wood drill bit, a rat-tailed file, and a whetstone at 38BK75; and an axe-head at 38BK76. The major activites represented were carpentry and maintenance of equipment.

The only toys found were clay marbles, one at 38BK75 and four at 38BK76. These, along with the small pots mentioned in Chapter VIII, were the only clear archaeological evidence of children at the sites. It is, of course, possible that the marbles represent gaming pieces used by adults for a game such as Oh-Wah-Ree (Zaslavsky 1974).

Fishing gear was present only at Site 38BK76. This included a rather large fish hook, four possible fish hooks, and a four-pronged "frog gig". Small fish hooks may also have been present, but probably would not have been preserved. With the arms group artifacts, there is artifactual evidence for both hunting and fishing at Site 38BK76.

Unidentified iron, lead, and brass/copper, which make up the majority of the Activities Group artifacts, may represent other artifact groups. Certain of these artifacts were identified during X-ray analysis and have been included in their respective group. Many of the iron fragments are undoubtedly broken nails, but which ones could not be determined. The lead fragments may represent the raw material for bale seals. These fragments are generally parts of flat lead sheets. The brass/copper fragments, only four were found, are also from flat sheets. Other Activities Group artifacts represented are barrel hoops, one from each site and harness tackle including buckles and bits, two at 38BK245, one at 38BK75, and four at 38BK76.

Locks are included in two places in South's (1977a) pattern. Door locks are included with architectural hardware; other locks are included with the Activities Group. One chest lock (Appendix E and Figure 84) was recovered at Site 38BK245 and one padlock was recovered from Site 38BK75 (Appendix E and Figure 85). Both locks were identified from X-ray. The working of the locking mechanism of the padlock was reconstructed after X-raying the lock from the front and side. This padlock was found in association with Structures 75B and 75B2 and resembles one illustrated by Noel Hume (1978:Figure 80) dating to 1770-1780 or perhaps earlier.

These artifacts (and to a lesser extent the artifacts discussed in Appendix E) and their relationships with one another and between sites present a picture of slave life which is only hinted at in published accounts. Most published accounts deal with the nineteenth century, in any case. From the artifacts alone one can draw the following characterizations of slave life at Curriboo and Yaughan plantations in the eighteenth century:

- The slaves made the major portion of the pottery they used.

- The proportion of imported goods increased during the later eighteenth and early nineteenth centuries.

- Slave material culture lacked variety and reflected a much lower economic status than was enjoyed by whites.

- Slave contacts with free Indians may have increased after approximately 1780 with unknown consequences for both cultures.

- Slave cooking was probably an informal affair conducted around individual or family fires, out of doors.

- Slave diet consisted of a high proportion of liquid or semi-liquid foods and very few dishes requiring plates or flatware.

- Slaves had access to guns, but apparently did not use them to provide wild game for themselves.

- Slaves also used the aquatic resources around them, but may not have benefited personally from their catch.

- Pipe smoking probably played a major role in leisure time activities. Otherwise, there was very little material evidence of leisure time activities. In fact, the major activities apparent in the slave quarter appeared to have been making ceramics, cooking, and eating, although other activities such as music (Appendix E), whittling or woodcarving, and marble games were hinted at.

- In sum, slave life, as evidenced by the artifacts alone, appeared to have been monotonous and on the bottom of the economic scale with very little real improvement as time went on. This corresponds closely with the evidence presented by the architecture in the previous chapter.

IX. ARTIFACT PATTERNS

Introduction

The third anticipated hypothesis stated in the project research design dealt with the patterned occurrence of artifact categories within the sites. That hypothesis was stated in the following manner:

> Hypothesis 3. Patterns of artifact disposal on archaeological sites are culturally determined and can be discerned through careful analysis. Since African slaves were the products of radically different backgrounds than British-Americans, the pattern of artifact disposal on African slave domestic sites should be discernable from that present on British-American sites. The difference will be expressed in varying frequencies of the artifact categories that the sites share in common, as well as the absence of certain categories (Garrow and Wheaton 1979).

Hypothesis 3 was construed as a primary research question for this project as it provided the mechanism whereby comparisons could be drawn in a quantitative fashion with other excavated sites.

The concept of quantification and organization of artifacts into categories following a patterning approach is fairly new in historic archaeology. The major impetus for quantification studies was provided by Stanley South's Method and Theory in Historical Archeology, published in 1977. Productive comparative studies utilizing quantification and the artifact pattern concept have been slow to reach print, but do exist (Lewis 1976; Lewis 1977; Holschlag, Rodeffer and Cann 1978; Drucker and Anthony 1979; Foss, Garrow and Hurry 1979; Otto 1975).

It is not sufficient to simply excavate a site, count the artifacts, and arrange them into South's (1977) artifact categories to achieve the type of comparable results needed for intersite comparison. South (1977:89) stated the major problem faced in studies of this type in the following manner:

> One of the problems faced when quantification studies are undertaken utilizing all artifact classes is obtaining collections of excavated data recovered under comparable conditions.

The methods employed in the excavations at Yaughan and Curriboo have been described elsewhere in this report, but a few points need to be restated at this time. The methods employed at Curriboo Plantation (Site 38BK245) were dictated by the condition of the site at the time of the investigation. The slave domestic occupation area had been machine stripped, and had been further damaged by the action of freeze/thaw and rain. The surface artifacts recovered from that area came from features or highly disturbed surface contexts. All feature fill was screened through quarter inch mesh screen, and numerous soil samples were taken and processed through flotation. The only area of Curriboo investigated that had not been subjected to prior disturbances was not a domestic occupation, and reflected usage as a warehouse/pro-

cessing structure followed by use as a plantation office. A second nondomestic area, which contained the heavily disturbed remnant of a brick clamp, was also explored.

The investigations at Yaughan on Sites 38BK75 and 38BK76 were conducted initially as large block excavations followed by controlled surface collections, machine stripping, feature excavation, and minor structural excavation. The block excavations were hand excavated and all soil (with the exception of a surface root mat in the case of 38BK76) was screened through quarter inch mesh. All feature fill was similarly screened, and standard sized soil samples were extracted from each provenience for flotation and small artifact recovery. The block excavations at Yaughan were placed so as to bracket individual structures, and an attempt was made in each case to include enough yard area so that representative external debris was recovered. The rationale behind the block excavations was to recover artifactual and architectural data from individual domestic occupations that could be used with a high level of confidence to construct artifact patterns reflective of the material culture of the inhabitants. The results of the block excavations were viewed as the means whereby the validity of the overall site patterns could be determined, as well as a control against which the data from more restricted contexts could be compared.

The Carolina and Frontier Artifact Patterns

Prior to discussing the artifact patterns retrieved from Yaughan and Curriboo Plantations it is necessary to consider the existing artifact pattern models. Stanley South (1977) has proposed two artifact models, the Frontier and Carolina Patterns, based on the result of a number of site excavations. His Frontier Artifact Pattern was postulated on the basis of three sites: Fort Ligonier in Pennsylvania; Fort Prince George in South Carolina; and Spaldings Store in Florida. Fort Ligonier and Fort Prince George dated from the French and Indian War, whereas Spalding's Store dated from 1763 to the present (South 1977:143). South characterized the Frontier Artifact Pattern as having a high percentage of Architecture Group artifacts in comparison to the Kitchen Group, but close examination of his data indicates that severe interpretive problems exist that cast doubt on that model.

The problems that exist with the Frontier Artifact Pattern Model have to do with the natures of the sites used, possibly the manner in which the sites were excavated, and definitely with the way in which the artifact patterns were constructed. Study of the three sites that make up the Frontier Artifact Pattern Model indicates that two clustered near one end of the observed range while the third exhibited significantly different artifact profiles. Fort Ligonier, a British occupied French and Indian War fort, exhibited the low kitchen/high architecture percentages that South (1977:146-149) states is typical of the Frontier Artifact Pattern Model. The problem that exists with Fort Ligonier is that South (1977:152) states that the excavations only sampled the site, but he does not give any indication of the size of the sample and how it was drawn. South (1978) has recently admitted that it is possible to recover the Frontier Artifact Pattern from excavations inside a structure while retrieving the Carolina Artifact Pattern from outside the same structure. At the moment it is not possible to determine if that was indeed the case at Fort Ligonier, based on South's statements.

The nature of the excavation at Fort Prince George was stated. According to South (1977a:152) the entire interior of the fort was excavated. The problem with the Fort Prince George Pattern is somewhat more basic than the one described for Fort Ligonier. A large percentage of the artifacts recovered from Fort Prince George were Cherokee ceramics presumably accumulated during the French and Indian War occupation. South initially placed the Cherokee ceramics in the Activities Group, but then observed:

> From the empirical percentage relationship profiles seen here it is apparent that the most deviant percentage is that for the Activities group from Fort Prince George. When the artifact classes for this group are examined, the 2583 Cherokee Indian sherds are the obvious reason for this 26.4 percent figure. The presence of this quantity of Cherokee pottery on the site is understandable since a major function of Fort Prince George was Indian trade (John Combes, personal communication). This being the case, it would be unreasonable to build into a frontier model this bias for Class 36, so we will remove it. With this single adjustment the relationships shown in Table 15 are seen (South 1977a:143-145).

The adjusted pattern for Fort Prince George is illustrated along with the patterns from Fort Ligonier and Spalding's Lower Store in Table 47. The Cherokee ceramics were thus dismissed, and a pattern reflecting a high percentage of Architecture to a low percentage of Kitchen Group artifacts was produced.

Perhaps the first flaw in South's approach was in attempting to place the Cherokee ceramics within the Activities Group. South (1977a:97) stated in defense of that placement:

> The Colono-Indian Pattern, Class 36, might functionally be included under the Kitchen group, but is kept under Activities due to the expected variability of this class of artifact, and its role in indicating Indian contact.

South thus admits mixing criteria for placement of this artifact class, as the entire thrust of the remainder of his basic model is predicated on function. He is not bothered by the tremendous variability present in Anglo-American ceramics when he places that within the Kitchen Group, but in turn uses the variability argument to relegate both Indian and, as will be later demonstrated, African slave ceramics to non-kitchen functions. Although placement of the Indian- and slave-made wares in the Activities Group has a great effect on some of the resulting patterns, the effect of totally dropping the Cherokee ceramics from the Fort Prince George sample is devastating. It does little good to quantify artifacts if the investigator is simply going to select what evidence he wants to use and discard the rest. It is to South's credit that he discussed his rationale for deleting the Cherokee ceramics from the Fort Prince George sample in sufficient detail that his steps could be reversed.

The basis for South's Frontier Artifact Pattern Model collapses when the Cherokee ceramics from Fort Prince George are placed within the site's Kitchen Group. Table 48 presents the Fort Prince George artifacts with the

TABLE 47. The Frontier Artifact Pattern As Proposed By South (1977: Table 16, p. 145)

Artifact Group	Fort Ligonier Pennsylvania 1758-1766		Fort Prince George South Carolina ca. 1753-ca. 1769		Spaldings Lower Store Florida ca. 1763-Present	
Kitchen	5,566	25.6%	1,679	22.7%	5,789	34.5%
Architecture	12,112	55.6	4,252	57.5	7,222	43.0
Furniture	44	0.2	6	0.1	51	0.3
Arms	1820	8.4	471	6.4	227	1.4
Clothing	833	3.8	70	1.0	51	0.3
Personal	99	0.4	9	0.1	10	0.1
Tobacco Pipes	411	1.9	851	11.5	2,343	14.0
Activities	893	4.1	50*	0.7	1,077	6.4
Total	21778	100.0%	7,388	100.0%	16,770	100.0%

*South originally included 2,583 Cherokee sherds in this total, but deleted them from the sample because of their effect on the Activities Group percentage.

TABLE 48. Adjusted Fort Prince George Artifact Pattern Compared to the Fort Watson Pattern

Artifact Group	Fort Prince George South Carolina 1753-1769*		Fort Watson Mound Summit South Carolina 1780-1781**	
Kitchen	4262	42.7%***	627	43.8%
Architecture	4252	42.6	595	41.6
Furniture	6	0.1	19	1.3
Arms	471	4.7	128	8.9
Clothing	70	0.7	23	1.6
Personal	9	0.1	2	0.1
Tobacoo Pipes	851	8.5	18	1.3
Activities	50	0.5	20	1.4
	9971	100.0%	1432	100.0%

* South 1977:143-145
** South 1977:158-159
***Cherokee ceramics included within the Kitchen Group

Cherokee ceramics properly placed and presents the Fort Watson artifact pattern as published by South (1977a:158-159). The artifact percentages are seen to be amazingly similar, varying more than 1.2 percent only in the Arms and Tobacco Pipe groups. Fort Watson was utilized during the Revolutionary War, and the elevated Arms Group is explained by South (1977a:159) as reflective of the battle that occurred on the site. Both sites were located in South Carolina, and in each case the excavations incorporated the area within the stockade (Ferguson 1977:45). The variance in the Tobacco Pipe Group is hardly surprising, as this seems to be one of the least stable and most subject to idiosyncratic behavior of all of the artifact groups.

The artifact pattern achieved from Spalding's Lower Store assumes new meaning if realigned and compared with Fort Prince George and Fort Watson. A total of 167 Colono-Indian ceramic sherds were listed with the Activities Group for Spalding's Lower Store (South 1977:161). Tables 49 and 50 illustrate the pattern originally presented by South and the slight shift in percentages achieved by moving the Colono-Indian ceramics from the Activities Group to the Kitchen Group. The revised pattern also reflects moving the single stub stemmed pipe from the Activities Group to the Tobacco Pipe Group. Again, the rationale for that shift is to place artifacts of similar function in the same groups.

The revised Frontier Artifact Pattern is best understood when compared to the Public Structure Pattern that has been proposed by Cara Wise (1978). Wise utilized three contexts from the Delaware State House in Dover to construct this pattern, and the three contexts chosen were believed to reflect the actual use periods of the site as a public structure. Wise excavated extensive areas of the State House yard, and although her excavations did not incorporate a ruin (the State House is still standing and functioning as a public building) and yard, the percentages she achieved in the contexts used to define the Public Structure Pattern are worthy of discussion. Table 51 reflects the three contexts Wise (1978:119-120) used as the basis of the Public Structure Pattern.

A second site used by Wise to formulate the Public Structure Pattern was Toft 8 excavated at Camden, South Carolina by Kenneth Lewis (1976:116). Lewis's excavations at Camden can best be described as extensive testing, and his methods are thus not strictly comparable to those employed in the excavations of the sites used to build South's Frontier Artifact pattern, but again (as in the case of Wise) his results are worthy of discussion at this point.

The third site used by Wise to define the Public Structure Pattern was the Hepburn-Reonalds House, which was excavated by South (1977:154-158) at Brunswick Town. South described the Hepburn-Reonalds House as a deviant from the Carolina Artifact pattern, and pointed out that it has been utilized as a shop and residence (1977:51).

The primary element that the Delaware State House, Toft 8 at Camden, and the Hepburn-Reonalds House had in common was that all three sites served public or mercantile functions. The Delaware State House functioned as a court and public offices from its initial occupancy. Toft 8 at Camden contained what has been described as a "brew house," thus reflecting its mercantile function. The Hepburn-Reonalds House functioned as a shop with an attached

TABLE 49. The Artifact Patterns From Spalding's Lower Store

Artifact Group	Spalding's Lower Store (following South 1977:145)		Spalding's Lower Store Revised	
Kitchen	5,789	34.5%	5,956*	35.5%
Architecture	7,222	43.0	7,222	43.0
Furniture	51	0.3	51	0.3
Arms	227	1.4	227	1.4
Clothing	51	0.3	51	0.3
Personal	10	0.1	10	0.1
Tobacco Pipes	2,343	14.0	2,344**	14.0
Activities	1,077	6.4	909***	5.4
	16,770	100.0%	16,770	100.0%

* Includes 167 Colono-Indian Sherds
** Includes 1 Stub Stemmed Pipe
***Excludes 167 Colono-Indian Sherds and 1 Stub Stemmed Pipe

TABLE 50. Revised Frontier Artifact Pattern Model

Artifact Group	Fort Prince George (Revised)		Fort Watson*		Spalding's Lower Store (Revised)		Revised Observed Range	Revised Frontier Artifact Pattern
Kitchen	4262	42.7%	627	43.8%	5,956	35.5%	35.5-43.8%	40.7%
Architecture	4252	42.6	595	41.6	7,222	43.0	41.6-43.0	42.4
Furniture	6	0.1	19	1.3	51	0.3	0.1-1.3	0.6
Arms	471	4.7	128	8.9	227	1.4	1.4-8.9	5.0
Clothing	70	0.7	23	1.6	51	0.3	0.3-1.6	0.9
Personal	9	0.1	2	0.1	10	0.1	0.1	0.1
Tobacco Pipes	851	8.5	18	1.3	2344	14.0	1.3-14.0	7.9
Activities	50	0.5	20	1.4	909	5.4	0.5-5.4	2.4
	9971		1432	100.0%	16,770	100.0%		100.0%

TABLE 51. Artifact Patterns From The Delaware State House Excavations (Wise 1978:119-120)

Artifact Group	Topsoil Above Crushed Brick 1788-1807		Crushed Brick 1788		North Lower Topsoil 1742-1788	
Kitchen	1142	51.4%	519	50.5%	380	48.0%
Architecture	982	44.2	440	42.8	335	42.3
Furniture	0	0.0	1	0.1	3	0.4
Arms	0	0.0	3	0.3	4	0.5
Clothing	32	1.4	34	3.3	36	4.5
Personal	4	0.2	0	0.0	0	0.0
Tobacco Pipes	40	1.8	24	2.3	28	3.5
Activities	23	1.0	6	0.6	6	0.8
	2223	100.0%	1027	99.9%	792	100.0%

living space, and was therefore also mercantile in function. The artifact pattern achieved from Toft 8 and the Hepburn-Reonalds House are presented in Table 52. The Hepburn-Reonalds House Pattern has been adjusted in the same manner that the previous South sites have been realigned, with the 8 Colono sherds from the site moved to the Kitchen Group.

The "Public Structure Pattern" as proposed by Wise bears close similarity to the revised Frontier Artifact Pattern. The similarities are indeed close enough that the two proposed patterns should be combined to form a new pattern. The components of this new pattern are not as dissimilar as they would appear at first glance. The Delaware State House, the Hepburn-Reonalds House, and Camden Toft 8 were located within town settings, while Fort Prince George, Fort Watson, and Spalding's Lower Store occupied rural settings. Despite dissimilar settings, four of the sites shared similar functions. The Hepburn-Reonalds House served as a shop, Camden Toft 8 was a "brew house" Fort Prince George doubled as a Cherokee Trading Post, and Spalding's Lower Store was a British Trading Post. The Delaware State House served entirely court and office functions, and Fort Watson appears to have been soley a military fortification. Loosely interpreted, all six sites served public versus single family domestic functions.

Table 53 depicts the observed ranges of the revised Frontier Artifact Pattern and the Public Structures Pattern. Those categories are reflected by the terms "urban," which correlates to the Public Structure Pattern, and "rural," which correlates with the revised Frontier Artifact Pattern. Perhaps it is significant that the extreme low range Kitchen Group occurrence and the extreme high range Tobacco Pipe Group occurrence came from the Spalding's Lower Store site. As an example, by dropping the Spalding's Lower Store site the observed range for the Kitchen Group becomes 42.7 to 52 percent. The Tobacco Pipe Group contracts to 1 to 8.5 percent. The adjusted Public Interaction Pattern is reflected in Table 54.

The concept of a Public Interaction Pattern appears to have value as a comparative unit. It is made up of both urban and rural sites that were not products of solely domestic functions. The term "Public Interaction" is applicable to this pattern in that the sites are products of public access and use, such as was found with the Delaware State House and the shops or trading posts, or specialized community interaction as in the case of the military installations. The term "Public" Pattern would be insufficient to describe the manner in which those sites were produced, as that would set the pattern apart as incorporating all public-related sites. It is anticipated that at least some public related sites (such as most types of industrial sites) would not conform to this pattern. At any rate, the Public Interaction Pattern is sufficiently well described in the preceding paragraphs to provide a comparative unit for the two domestic-related patterns that will be described in the following sections.

The second artifact pattern model proposed by South (1977:83-139), the Carolina Artifact Pattern, was based on seven contexts at five sites. Problems exist with the model as stated by South, and a close examination of these problems is necessary prior to any attempt to utilize his results.

TABLE 52. Artifact Patterns From The Hepburn-Reonalds House*
And Camden Toft 8**

Artifact Group	Camden Toft 8		Hepburn-Reonalds House	
Kitchen	966	52.0%	3714	45.4%
Architecture	824	45	3953	48.3
Furniture	0	0.0	18	0.2
Arms	1	0.01	12	0.1
Clothing	0	0.0	24	0.3
Personal	0	0.0	4	0.1
Tobacco Pipes	16	1.0	374	4.6
Activities	41	2.0	84	1.0
	1848	100.01%	8183	100.0%

* South 1977:126-127, adjusted with Colono sherds moved to Kitchen
**Lewis 1976:116

TABLE 53. The Public Interaction Pattern

Artifact Group	Observed Range-Urban	Observed Range-Rural	Combined Observed Range
Kitchen	45.4-52.0%	35.5-43.8%	35.5-52.0%
Architecture	42.3-48.3	41.6-43.0	41.6-48.3
Furniture	0.0-0.4	0.1-1.3	0.0-1.3
Arms	0.0-0.5	1.4-8.9	0.0-8.9
Clothing	0.0-4.5	0.3-1.6	0.0-4.5
Personal	0.0-0.2	0.1	0.0-0.2
Tobacco	1.0-4.6	1.3-14.0	1.0-14.0
Activities	0.6-2.0	0.5-5.4	0.5-5.4

TABLE 54. The Public Interaction Pattern Adjusted To Exclude Spaldings Lower Store

Artifact Group	Observed Range	Mean
Kitchen	42.7-52.0%	
Architecture	41.6-48.3	
Furniture	0.1-1.3	
Arms	0.0-8.9	
Clothing	0.0-4.5	
Personal	0.0-0.2	
Tobacco	1.0-8.5	
Activities	0.5-2.0	

Two of the contexts utilized by South were from the Signal Hill Site (Jelks 1973) which is located in Newfoundland. The remainder of the sites used by South are located in the southeastern United States, and at this point artifact pattern studies are not sufficiently advanced to determine if regional, national, or worldwide patterns exist. Mixing Signal Hill with southeastern sites to form a basic model thus becomes somewhat suspect. The more important reason for dropping Signal Hill 4 and 9 from the Carolina Artifact Pattern at this time, though, is that not all of the artifact patterns from those contexts are based on actual counts. The nail counts were not included in the site artifact lists, and South (1977) estimated the nail counts based on relative percentage of occurrences on southeastern sites. South's estimates may be entirely correct, but there is no way of determining that at this time. It should also be noted that construction types might be one of the most variable patterns between a subtropical climate and a northern climate.

Two other contexts used by South (1977) in the Carolina Artifact Pattern Model are suspect for other reasons. Fort Moultrie, located on the South Carolina coast, was investigated and reported by South (1974). Fort Moultrie was a special function site within which occupation occurred. A compelling reason for dropping Fort Moultrie from the Carolina Artifact Pattern is the fact that it housed a large number of slaves during at least some points in its history, and their presence was amply reflected in the high percentage of Colono ceramics recovered by South (1977). South placed the Colono ceramics within the site's Activities Group. It cannot be determined from available research whether or not he keyed on slave occupied areas of the Fort, but moving the Colono ceramics from the Activities Group to the Kitchen Group would significantly change the results he achieved. At any rate, Fort Moultrie A and B should be dropped from the Carolina Artifact Pattern until the identity of South's research population can be resolved.

Removal of the Signal Hill and Fort Moultrie sites from the Carolina Artifact Pattern Model leaves three of South's original seven contexts for use in a Revised Carolina Artifact Pattern Model. The three remaining contexts (at three sites) do require additional adjustments before they can be employed in the Revised Model, however. There is little doubt, based on the Cooper River Historic Sites Investigations and the results achieved by Drucker and Anthony (1979) at Spiers Landing, that Colono ceramics should be placed within the Kitchen Group. The sites that compose the suggested Revised Carolina Artifact Pattern Model listed in Tables 55 and 56 include Colono ceramics in the Kitchen Group where they properly belong.

The Carolina Slave Artifact Pattern

The results of the historical research indicate that Yaughan and Curriboo Plantations were in the early stages of development in 1745. Isaac Cordes owned an interest in both plantations at that time, and his estate inventory placed livestock and tools on those plantations in that year. Study of the historical records and the results of the artifact analysis indicate that Site 38BK76 represented the earliest slave quarter at Yaughan Plantation, and that that quarter was almost completely abandoned in favor of the slave quarter at 38BK75 by around 1795. Site 38BK75 was apparently occupied by around

TABLE 55. Revised Carolina Artifact Pattern Observed Range and Mean

Artifact Group	Revised Carolina Artifact Pattern-Observed Range	Carolina Artifact Pattern Mean
Kitchen	51.8-67.0%	59.5%
Architecture	25.2-31.4	27.6
Furniture	0.2-0.6	0.4
Arms	0.1-0.3	0.2
Clothing	0.6-5.4	3.0
Personal	0.2-0.5	0.3
Tobacco Pipes	1.8-14.0	7.8
Activities	1.0-1.9	1.3

TABLE 56. The Revised Carolina Artifact Pattern*

Artifact Group	Brunswick S25 (1732-1776)		Brunswick S10 (1728-1830)		Cambridge 96 (1783-1820)	
KITCHEN**	22710	61.77%	6795	51.80%	12916	64.97%
ARCHITECTURE	9620	26.17%	4116	31.38%	5006	25.18%
FURNITURE	83	.23%	82	.63%	35	.18%
ARMS	34	.09%	45	.34%	27	.14%
CLOTHING	1070	2.91%	72	.55%	1069	5.38%
PERSONAL	71	.19%	20	.15%	108	.54%
PIPES	2830	7.70%	1829	13.94%	349	1.76%
ACTIVITIES***	347	.94%	159	1.21%	370	1.86%
Totals	36765	100.00%	13118	100.00%	19880	100.01%

*Modified from South (1977:83-139).
**Includes Colono ceramics.
***Colono ceramics deleted.

1784, when the owner of the plantation, Thomas Cordes, married and began to expand his operation. Thomas Cordes apparently doubled the number of slaves at Yaughan from the mid-1780s to the mid-1790s, when financial reversals forced him to reduce his slaveholdings back to around 40. It is our assumption that Site 38BK75 dates from the expansion period, and that 38BK76 was abandoned in the 1790s as Thomas Cordes began to reduce his holdings. This assumption is borne out by ceramic bracket analysis (South 1977:219-220) conducted on the datable ceramics from the two sites, but is not substantiated by the Mean Ceramic Dates (South 1977:220) from the two areas.

The Mean Ceramic Dates (Figure 86) on Sites 38BK76 and 38BK75 appear to be contradictory and confusing on the surface. The overall MCD of 1773.0 on Site 38BK76 was 3.01 years later than the proposed 1770 mean occupation date for the site. The proposed occupation range on Site 38BK75 of 1784-1826 was based on historical documentation and ceramic bracket dating, providing a mean occupation date of 1805. The MCD on Site 38BK75 was 1789.8, or 15.24 years earlier than the proposed mean occupation date. The early MCD on 38BK75 was not surprising in view of the results Drucker and Anthony (1979) achieved at Spiers Landing, which was another slave occupied site in Berkeley County, South Carolina that dated from the same period as 38BK75. In fact, time lag (Adams and Gaw 1977) is to be expected on sites occupied by Afro-American slaves (Braley 1980). The reverse of time lag which occurred on Site 38BK76 does require explanation, however.

The concept of mean ceramic dating is based on the premise that datable ceramics will be acquired, broken, and discarded at a fairly uniform rate throughout the occupation history of a site. If a degree of uniformity of acquisition and discard occurs, then application of the regression formula that forms the heart of the mean ceramic dating concept should produce a date that is roughly equivalent to the mean occupation date of the site. The major variables that can materially alter the results of the MCD if acquisition and deposition are uniform and the ceramics are correctly identified would then be use of erroneous dates for the individual ceramic types or excavation sample error. We feel that we can rule out significant ceramic identification errors and excavation sample error in the case of Site 38BK76. Also, the manufacture dates utilized are date ranges that have produced accurate MCDs on numerous other eighteenth century sites (South 1977). If those variables have been successfully controlled, then the most likely answer for the late MCD at Site 38BK76 relates to the process of ceramic acquisition and discard that took place on the site.

The ceramic collection from Site 38BK76 was composed of 88.9 percent Colono with 11.1 percent imported types. The ceramic collection from Site 38BK75 consisted of 64.2 percent Colono and 35.8 percent imported types. Several minor differences existed between the Colono from Sites 38BK75 and 38BK76, but the major variance was the fairly high percentage of jar forms at 38BK76, and their virtual absence at 38BK75. The form shift in itself does not necessarily account for the relative percentage of Colono to imported ceramics on the two sites because the jar forms appear to have been primarily used as cooking vessels, and that functional niche was apparently not filled by imported vessel types. The interpretive key in this case probably relates to the economic and social impact that the Revolutionary War had on the general

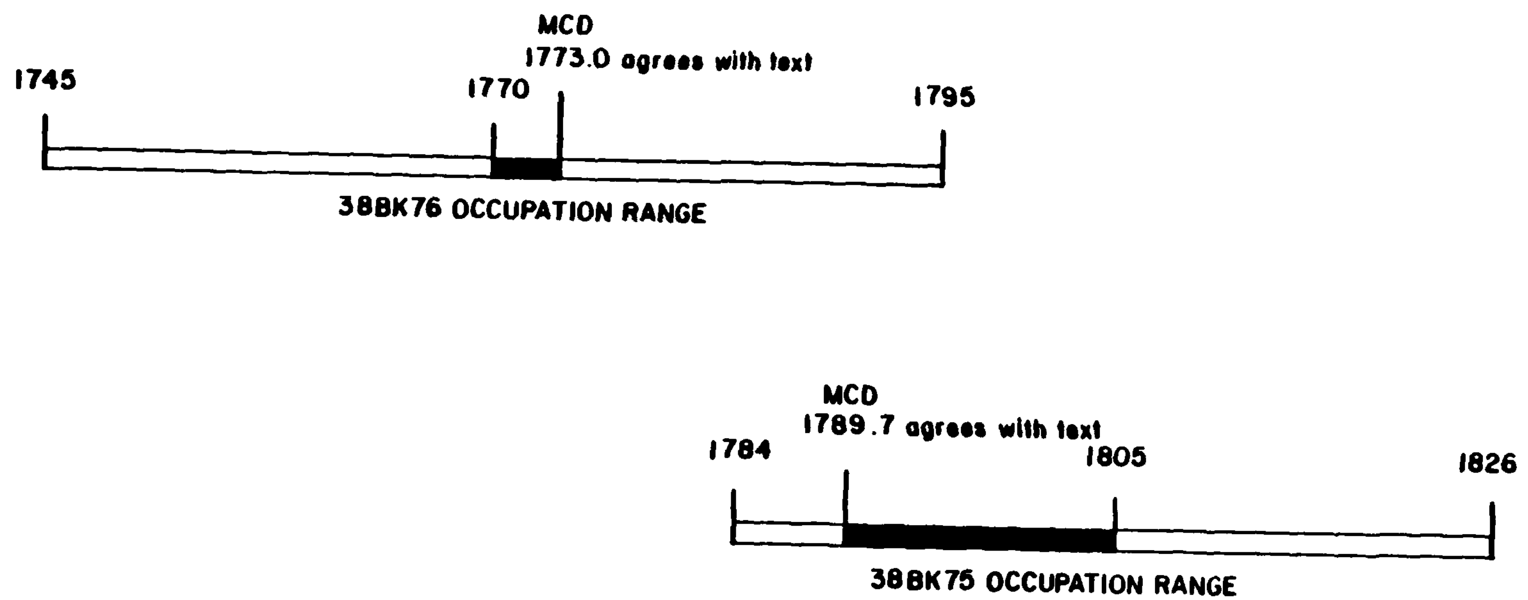


FIGURE 86
The Mean Ceramic Dates
and Mean Occupation Dates
for Site 38BK76 and 38BK75

area. That is, it appeared that more goods from outside the immediate environs of Yaughan Plantation became available to the slaves during and/or after the Revolutionary War as the virtual economic/social isolation of the slaves was broken. This, of course, assumes that the Colono was being made at Yaughan by slaves for their own use, which we feel we have established on the basis of our research. If these interpretations are correct, then it is reasonable to assume that a much smaller percentage of imported wares was utilized at Yaughan prior to the Revolutionary War, and that the ceramic assemblage on the site underwent a dramatic shift during and/or after the war. The late MCD on Site 38BK76 then becomes a function of the irregular acquisition and discard patterns that were operative on the site. In this case the MCD ceases to be a dating tool and becomes a key to understanding the nature of the Site 38BK76 ceramic assemblage through time.

If the interpretation of the cause of reverse time lag on 38BK76 is correct, then the presence of time lag on 38BK75 indicates that the ratio of Colono to imported ceramics probably remained fairly stable through the occupation history of Site 38BK75. That interpretation can be very important to future research on Afro-American slave-occupied sites in the area because it would seem to indicate that there was not a gradual decline in the utilization of Colono wares through time as has been generally assumed. It seems more likely based on our research that the eventual abandonment of Colono wares will be found to have proceeded as a few radical shifts rather than as a gradual decline.

Understanding the nature of the ceramic assemblages at Site 38BK76 and 38BK75 through time enhances understanding of the artifact patterns extracted from the sites. As an example, if it is correct to assume that a majority of the imported ceramic sample at Site 38BK76 dated from late in the occupancy of the site, then it would follow that at least some of the other nonlocal artifact categories followed a similar acquisition/discard pattern. The artifact patterns from Sites 38BK75 and 38BK76 (Table 57) are surprising enough as they stand, but they take on an even greater meaning if it is assumed that the 38Bk76 pattern was buffered in the manner previously described.

The artifact patterns extracted from Yaughan Plantation, when combined with the results from Curriboo and Spiers Landing (Drucker and Anthony 1979) are distinctly different from the Revised Carolina Artifact Pattern and the proposed Public Interaction Pattern. The Public Interaction Pattern, with its nearly equal Architecture Group to Kitchen Group counts, is easily distinguished from what we propose to call the Carolina Slave Artifact Pattern. The Revised Carolina Artifact Pattern, bears closer resemblance to the percentages that characterize the Carolina Slave Artifact Pattern, but becomes less similar if modified in response to what has been learned from the investigation of the Cooper River Historic Sites.

TABLE 57. The Carolina Slave Artifact Pattern*

Artifact Group	Yaughan 38Bk76 (1745-1795)		Curriboo 38Bk245** (1745-1800)		Yaughan 38Bk75 (1784-1826)		Spiers Landing*** (1790-1830)	
KITCHEN	18800	84.20%	4420	79.77%	4439	70.73%	2275	74.84%
ARCHITECTURE	2640	11.82%	757	13.66%	1569	25.00%	631	20.76%
FURNITURE	12	.05%	4	.07%	5	.08%	2	.07%
ARMS	5	.02%	15	.27%	11	.18%	6	.20%
CLOTHING	66	.30%	20	.36%	32	.51%	24	.79%
PERSONAL	6	.03%	2	.04%	4	.06%	2	.07%
PIPES****	752	3.37%	300	5.41%	182	2.90%	74	2.43%
ACTIVITIES*****	46	.21%	23	.42%	34	.54%	26	.86%
Totals	22327		5541		6276		3040	

*Colono included in Kitchen Group
**Does not include Structure 245C
***Modified from Drucker and Anthony (1979)
****Includes Colono pipes
*****Unidentified metal deleted

In summary, South's Carolina Artifact Pattern was based on the results of the excavation and analysis of seven sites. Two of those sites, denoted Signal Hill 4 and Signal Hill 9 (Jelks 1973), should be struck from the Carolina Artifact Pattern for two reasons. The first reason is that the sites are located well outside the southeastern United States (Newfoundland), and may not be reflective of the patterns of acquisition and discard operative on distinctly southern sites. The second, and most important, reason to drop those sites is that the nail percentages within the Architecture Group are not based on actual artifact counts, but instead represent estimates based on artifact ratios from southern sites. Two more sites, both within Fort Moultrie (South 1974, 1977) on the South Carolina Coast, should also be dropped from the Carolina Artifact Pattern. Fort Moultrie was a special function site that should not be used for comparison with purely domestic sites. Also, Fort Moultrie housed a large number of slaves at at least some points of its history, and their presence was amply reflected by the high percentage of Colono ceramics that South placed within the site's activities groups. It is not known on the basis of South's excavation and research whether or not he keyed on slave occupied areas of the Fort, but revision of his Fort Moultrie A and Fort Moultrie B patterns results in artifact patterns that would comfortably fit within the proposed Carolina Slave Artifact Pattern. We propose simply dropping Fort Moultrie A and B from the Carolina Artifact Pattern for the moment until the question of the identity of South's research population can be resolved.

Removal of the Signal Hill and Fort Moultrie sites from the Carolina Artifact Pattern (CAP) leaves three sites of South's original seven for comparison with the proposed Carolina Slave Artifact Pattern (CSAP). The three remaining sites require an additional adjustment before the CAP and CSAP can be compared, however. There is little doubt based on our work and the results achieved by Drucker and Anthony (1979) that Colono ceramics should be placed within the Kitchen Group. The sites that now compose the Revised Carolina Artifact Pattern shown in Table 58 reflect that revision, with the Colono ceramics moved from the Activities Group to the Kitchen Group.

The Carolina Slave Artifact Pattern can be distinguished from the Revised Carolina Artifact Pattern on a number of points (Table 58). The most obvious differences are the elevated Kitchen Group and lowered Architecture Group percentages within the Carolina Slave Artifact Pattern. Perhaps the most important comparative factor resides within the relationship of the joint Kitchen-Architecture Groups found in the two patterns. The vast majority of the durable material culture from the four slave occupied sites of the CSAP falls into the Kitchen and Architecture (subsistence-shelter) Groups. The combined Kitchen-Architecture Group artifacts account for 96.02 percent of the recovered artifacts at 38BK76, 93.43 percent at 38BK245, 95.73 percent at 38BK75, and 95.60 percent at Spiers Landing. In comparison, within the Revised Carolina Artifact Pattern, Brunswick S25 has a combined Kitchen-Architecture of 87.94 percent, Brunswick S10 totals 83.18 percent, while Cambridge 96 reflects a total of 90.15 percent. The combined Kitchen-Architecture on sites within the CSAP thus averages 95.20 percent of the total recovered assemblage. The average on sites within the Carolina Artifact Pattern is a somewhat lower 87.09 percent. If pipes are added to these figures, an average of 98.73 percent of the recovered artifacts on the slave-occupied sites fall into the three categories, leaving a very sparse

Table 58. Comparison of the Carolina Artifact Pattern and the Carolina Slave Artifact Pattern

Artifact Group	Revised Carolina Artifact Pattern Observed Range	Revised Carolina Artifact Pattern	Carolina Slave Artifact Pattern Observed Range	Carolina Slave Artifact Pattern
KITCHEN	51.80%-64.97%	59.51%	70.73%-84.20%	77.39%
ARCHITECTURE	25.18%-31.38%	27.58%	11.82%-25.00%	17.81%
FURNITURE	.18%-.63%	.35%	.05%-.08%	.07%
ARMS	.09%-.34%	.19%	.02%-.27%	.17%
CLOTHING	.55%-5.38%	2.95%	.30%-.79%	.49%
PERSONAL	.15%-.54%	.29%	.03%-.07%	.05%
PIPES	1.76%-13.94%	7.80%	2.43%-5.41%	3.53%
ACTIVITIES	.94%-1.86%	1.34%	.21%-.86%	.51%
Totals	------------	100.01%	--------------	100.02%

1.27 percent to be scattered over the remaining groups. Combining pipes in the Carolina Artifact Pattern figure, there remains 6.11 percent for the other artifact groups.

The Carolina Slave Artifact Pattern is admittedly based on a small number of sites, but even so it may reflect some trends worthy of mention. The highest Kitchen Group and lowest Architecture Group percentages are found on the oldest site (38BK76). The architectural shift that apparently took place between 38BK76 and 38BK75 is discussed elsewhere, but it is felt that the change in the Kitchen and Architecture Groups from the older to the younger site reflects culture change. Indeed, the figures presented in Table 58 may represent quantitative acculturation that occurred from the earlier to later sites. It is entirely feasible that later nineteenth century sites occupied by Afro-Americans will prove to be practically indistinguishable from white-occupied sites based on artifact pattern studies. In fact, that should prove to be the case if the Carolina Slave Artifact Pattern truly has validity.

X. SLAVE SUBSISTENCE

Introduction

The botanical material was studied by Paul Gardner of the University of North Carolina. His report is reproduced with all tables in Appendix G. The faunal material was analyzed by Kay Wood and Elizabeth Reitz of the Zooarchaeology Laboratory, University of Georgia. Their report is included as Appendix H. Further analysis of the faunal material was subsequently conducted by SSI in Marietta, and the following discussion includes data from both analyses.

As noted in the discussions of the features, soil conditions played a large role in determining which categories of floral and especially faunal remains would be preserved and to what degree. Perhaps the most important condition affecting preservation was the existing acidity of the soils at the sites. More detailed soils data, including pH, total organic nitrogen, carbon and phosphate, for individual structures and features is presented in Appendix C. When all pH readings are considered, the following values are obtained:

TABLE 59. Soil Acidity

Site	Hand-excavated Units	Features	Average
38BK75	5.99	5.56	5.78
38BK76	5.96	6.37	6.17
38BK245	3.97	3.59	3.78

There was no statistically significant difference between units and features within each site. The average readings seriated the sites from least acid, Site 38BK76, to most acid, Site 38BK245; Site 38BK75 is very close to 38BK76. As pointed out by Wood and Reitz (Appendix H), the natural pH level of mammalian bone tends to be from 7.0 to 8.0. A pH of 3.5 or even 6.0 would militate against good bone preservation. This may be even more critical for fish bone, since it may be more alkaline than mammalian bone.

Coupled with disturbance from agriculture at 38BK75 and 38BK245, logging at 38BK76, and mechanical stripping conducted prior to mitigation at 38BK245, the pH levels at Yaughan and Curriboo did not hold out much hope for conclusive data for faunal analysis. Be this as it may, certain general conclusions and comparisons could be made which illuminate slave diet and subsistence patterns with respect to botanical and faunal resources.

Ethnobotanical Remains

Obviously, not all plant materials utilized by a site's inhabitants are equally likely to be preserved by carbonization. Those plant parts deliberately added to the fire as fuel are the most likely to be preserved. At the

opposite extreme, plants used exclusively in areas distant from fires will usually be absent from the archaeological record. The proximity to fire which a plant is utilized is not the only factor which affects the probability of a plant being recovered archaeologically. Dense plant structures such as seeds tend to be preserved in a recognizable form. Succulent plant parts such as leaves or tubers are much less likely to be preserved. Hence, evidence of the utilization of plants for their leaves or roots is difficult to acquire. Finally, the way in which a plant is processed may greatly affect the probability of its being preserved. The parching of seeds over an open fire is highly likely to result in some seeds entering the fire where they may be carbonized fairly intact. On the other hand, the grinding of seeds to produce flour or meal decreases the possibility of correctly identifying the seeds.

It was decided to focus the analysis on the larger features, since the postholes tended to have little material and included large proportions of nonorganic material. Unfortunately, it was not possible to analyze all of this material. Instead, for the particularly large features, samples of one-half to one-fourth of the feature were analyzed. In this way it was possible to analyze at least a portion of the material from each clay extraction/trash pit from the three sites. Although a greater quantity of analyzed material and a broader range of proveniences would, of course, be desirable, it was felt that the results obtained by the above sampling procedures were sufficient to characterize the utilization of plant resources at the Yaughan and Curriboo Plantations.

During the course of analysis, 726 grams of material were examined from 61 provenience units (Tables 60 and 61). Overall, the botanical samples were rather trashy, containing a total of 135 grams of material other than carbonized plant remains. The carbonized material included 566 grams of wood and pitch, 2.5 grams of maize cupules, 0.8 gram of walnut shell, 1.0 gram of hickory nutshell, 10.5 grams of peach pits, 1.5 grams of small seeds, and 7.8 grams of unidentified fragments, a category which included a mixture of rather amorphous pieces, some of which were probably galls, fungus, or bark.

Table 60. Seeds by Site

	38BK75	38BK76	38BK245	Total
Rice	4	10	5	19
Maize	1	1	4	6
Peach	10	1	1	12
Hawthorn	1			1
Bramble			1	1
Sumac	1			1
Legumes	6	7	1	14
Goosegrass	3			3
Unidentified Grass: I	12	44	11	67
Other Grasses	1	1	3	5
Rumex			1	1
Polygonum			1	1
Acalypha		1		1
Unidentified	41	49	47	137
TOTAL	80	114	75	269

Table 61. Botanical Material by Weight (in grams)

	38BK75	38BK76	38BK245	Total
Trash	46.98	42.87	135.39	225.24
Unidentifiable Fragments	2.02	2.31	7.76	12.09
Wood and Pitch	216.56	167.26	565.80	949.62
Maize Cupules	.34	1.38	2.51	4.23
Walnut Shell	.48	.25	.80	1.53
Hickory Shell	.72	.21	.98	1.91
Peach Pits	9.83	.49	10.50	20.82
Small Seeds	.79	.42	1.46	2.67
TOTAL	277.73	215.19	725.76	1218.68

The majority of the carbonized plant remains recovered from Yaughan (38BK75 and 38BK76) and Curriboo (38BK245) represented plants used as fuel. This included the maize cupules and the wood and pitch. "Pitch" is used here as a generic term for any resinous substance exuded by wood as it burns and does not refer to a deliberately manufactured naval store. Wood occurred in all of the features analyzed, and although no rigorous attempt at species identification was undertaken, it can be said with confidence that the overwhelming majority of wood fragments were pine, with hardwood fragments being extremely rare. Maize cupules were present in 25 of the 51 flotation samples and indicated the use of corncobs as fuel.

The presence of maize cupules also strongly suggested the use of maize as a foodstuff; this was further indicated by the occurrence of maize kernels in four of the samples. This was a surprisingly low number, considering the well-established role of maize in prehistoric and historic period diets in the southern United States. Of course, the possibility that maize was not an important dietary item of the Curriboo and Yaughan slaves could not be ruled out absolutely, but the low number of kernels, the large number of cupules in the samples, and the regularity with which maize was mentioned as a staple food of slaves from mid-nineteenth century South Carolina plantations (c.f. Rawick 1972:14, 26, 39, 52, 55, 62, 99, 119 and other passages) seemed contradictory. The low number of maize kernels may have been the result of highly effective milling, which has militated against preservation. Rice (*Oryza sativa* L.), 19 grams of which occurred in 12 samples, appeared to have been an important foodstuff. The one other cultigen which was definitely identified was the peach (*Prunus persica*), which, like rice, is a native of Asia. Twelve peach pits from nine samples were recovered, but this probably did not accurately reflect its true dietary significance. Rather than rivaling rice or maize as a foodstuff as its frequency of occurrence might suggest, peaches were likely little more than a dietary complement available only during a limited harvest season of June to July (c.f. Schopmeyer 1974:664). Its relative abundance in archaeological sites was largely due to the density of the pit, which makes it durable, and to its large size which makes it noticeable to excavators.

One other plant remain may have been derived from a cultigen. Feature F65 at 38BK245 contained a carbonized plant part, roughly discoidal with a diameter of 18 millimeters and a thickness of 9 millimeters. This most closely resembled a section of the peduncle (fruit stalk) of one of the Cucurbitaceae, but this identification was far from certain.

The walnut and hickory nutshells seemed to represent occasional foods rather than dietary staples. Walnut occurred in only seven samples and hickory in only ten out of the total 61. Furthermore, they were not a large component of any flotation sample; in fact, their total combined weight of 1.78 grams comprised only 0.3 percent of the total carbonized plant remains recovered. This seemed to indicate a very limited exploitation of nuts by the site inhabitants.

The hawthorn (Crataegus sp.) and bramble (Rubus sp.) seeds also seemed to represent dietary complements, as both were represented by only one seed apiece. The fruit of the hawthorn is a small pome with large seeds and a small amount of pulp (Fernald and Kinsey 1958). It is, therefore, a food of limited appeal, although John Lawson in 1709 described the haws of North Carolina as having " . . . a very pleasant agreeable Taste" (Lawson 1967:112). Bramble (a general term for the genus which includes blackberries, raspberries, and dewberries) can be quite abundant in localized areas and can produce a profusion of fruits during its midsummer fruiting season. The sole seed of Sumac (Rhus sp) may have represented a dietary item, as the seeds can be used to produce a pleasantly acidic beverage (Fernald and Kinsey 1958). It is equally possible, however, that the seed may have derived from a nearby plant that had colonized the disturbed habitats created by human activities.

The other plants which were identified from the samples were unlikely to have been of economic importance, and were weedy species which thrive in disturbed habitats such as those surrounding human habitations. The 13 legume seeds seemed to fit into this category rather than being domesticated beans. A legume from Feature F2 at 38BK75 may have been rattlebox (Crotalapia sp.), but it was too distorted to be confidently identified. Five legumes from Feature F82 at 38BK76 may possibly have been Strophostyles sp., but this identification was far from certain. Two other "weedy" genera, Rumes and Acalypha, were represented by one seed each, and four seeds were are possibly Euphorbia collata. These plants invade disturbed habitats, so their presence around plantation slave quarters was hardly remarkable.

The Polygonum seed, 1.6 millimeters long, and trigonous with concave sides, was probably Polygonum hydropiperoides. This species inhabits swamp forests, streams, and ditches (Radford, Ahles, and Bell 1968), so its presence in an irrigation ditch (Feature F8 at 38BK245) is understandable. How it became carbonized is more problematic, but may be an indication of fires located outside of the domestic structures. Fires may have been used to clear areas of weedy growth, or the seed may have been dispersed into a fire used for some other outdoor activity such as boiling laundry, making soap, or burning rubbish.

Several grass seeds were also found in the samples. Three carbonized seeds of goosegrass (Eleusine indica L.) were of special interest. Goosegrass is a common grass in the Carolinas today (Radford, Ahles, and Bell 1968:116), but is a native of Asia (Martin 1972:19). The three seeds found in the early nineteenth century Yaughan Plantation samples (Appendix G) may be the earliest evidence of its occurrence in the New World.

The seeds termed "unidentified type one" were the most numerous grass seed found and the most troubling. They are roughly cylindric with a beveled end and shallow groove along one side. Their classification as a grass seed is somewhat questionable, since the bevel and the shallow groove are on the same side of the seeds. The seeds are highly variable in size, ranging from 2.3 millimeters to 4.2 millimeters long. It is possible that this seed type is not a grass, and may, in fact, not be a seed.

The other "unidentified grasses" category included one seed of either Setaria or Paspalum from the kiln (Structure 245K) at 38BK245. Identification could not be more definite, since the seed was both distorted and eroded. The other four seeds in this category were fragmentary remains of small grass seeds such as Panicum or Digitaria. Like the other weedy plants identified, the grasses were likely to have been colonizers of disrupted areas of the plantations, and their seeds were most likely carbonized accidentally rather than as a result of any intentional human utilization.

A paleoethnobotanical study such as this one has much less chance of gaining information concerning cash crops. This is hardly surprising, however, as excavations centered on domestic areas are not likely to encounter evidence of the processing, storage or transporting of cash crops, since these activities were probably conducted in areas of the plantation removed from the domestic structures. An expansion of the excavations to include other areas of the plantations might have detected archaeological evidence for particular cash crops, but more likely in the form of structures associated with their storage or processing than in remains of the plants themselves. It is in gaining information concerning the subsistence practices of the Yaughan and Curriboo slaves that this study has been most successful. Otto (1980:318-337) found that at Cannon's Point Plantation, St. Simons Island, Georgia, the slaves used proportionally less wild animal foods than planters, and thus one might expect wild plants to have played a less important role in the diet of the Yaughan and Curriboo slaves. This, in fact, appears to have been the case. Cultivated plants seem to have provided the overwhelming portion of the plant food eaten by the slaves, with wild plants providing only occasional dietary complements. Also, the range of plants utilized for food is quite small, with only seven, or possibly eight, plants being utilized; only maize and rice seemed to be of any great importance.

The reasons for the highly focal adaptation of the plantation slaves can only be speculated upon. It is, of course, possible that the paucity of wild plants is more apparent than real. The slaves may well have exploited wild greens such as pokeweed (Phytolacca americana) or goosefoot (Chenopodium spp.), or potatoes and other root plants which have not been preserved, and it is also possible that they grew cultivated greens such as turnip or mustard (Brassica spp.). Wild plants may have been of little importance due to the adequacy of the cultigen derived diet, which gave no motivation to gather wild foods. On the other hand, the lack of wild plant utilization may have reflected the particular social conditions of the slaves. Effective exploitation of wild plants requires considerable mobility in order to visit the often dispersed locations where the plants occur, and considerable freedom to schedule activities so that one can gather the wild plants during their usually restricted harvest period. Since the documents have shown that the slaves probably did have some mobility, the lack of wild food sources may be a result of a conscious decision not to use wild foods, ignorance of which plants were edible, or restricted freedom to schedule activities.

The overall adequacy of the slaves' diet was difficult to assess. The primacy of rice and possibly corn as foodstuffs suggested a diet heavy in carbohydrates and low in other nutrients, but this conclusion must be tempered by the knowledge that other foods were probably eaten but not preserved. It is speculated that the slaves' diet was constricted, not to the point of chronic malnutrition, but rather to that of culinary monotony in the vegetal diet. This arrangement would provide the plantation owners with a healthy and relatively inexpensive work force.

Zooarchaeological Remains

While the absence of a particular species may not be indicative of its absence in the slave diet due to differential preservation, the undoubted presence of species does indicate a certain association with slaves and presumably with slave diet. Unfortunately, compilation of data on the zooarchaeology of the sites was greatly hampered by poor preservation, which was of much greater extent than was the case with the ethnobotanical material. The following tables present data developed by Wood and Reitz (Appendix H) as well as by SSI staff members.

TABLE 62. Animal Food Sources

	38BK75	38BK76	38BK245
White tailed deer	x		
Common oyster		x	x
Quahog clam			x
Opossum			x
Goose	x		
Freshwater catfish	x		x
Cow	x	x	x
Pig	x	x	x
Dog			x
Snake/lizard		x	x

x indicates presence

TABLE 63. Minimum Number of Individuals

	38BK75	38BK76	38BK245
White tailed deer	1		
Common oyster*		1 (present)	3 (present)
Quahog clam*			1 (present)
Opossum			1 1
Goose	1		
Freshwater catfish	1		1
Cow	3	2	4
Pig	5	2	6
Dog**		1	1
Snake/lizard**		1	1
	11	6+	14+
Cow/pig	8	4	10
Other	3	2+	4+

*The oyster and clam shell were always found in close association with architectural features and often in a mortar matrix. The actual minimum number of individuals would number in the hundreds if properly analyzed. It is felt, however, that little if any of the shellfish collected were included in the slave diet.

**These are included since they could potentially have been food sources, although it is more likely that they are not.

Several striking facts are apparent in this data. Only pigs and cows are represented at all three sites. While caution must be used in comparing relative frequencies, the overall bone weight, fragment count, and MNI show pigs and cows outweighing and outnumbering the other resources combined, by a factor of 2:1 or more. It was concluded that these domestic animals were a major, if not the major, meat source in slave diet at Yaughan and Curriboo.

As with the botanical material, the absence of bone did not necessarily mean absence in the diet; however it was remarkable that no chicken, duck, or rabbit bones were preserved, whereas goose was present (Table 61). Seven wild species and genus, including borderline cases (snake and dog), were represented while only two domestic species were represented; however those were in high quantities of individuals. When a wide variety and low frequency of a certain class of resource are present, combined with high quantities in a second and restricted class of resource, it seems safe to conclude a lack of specialization in the former and a concentration in the latter. Exploitation of wild resources was not a specialized activity whereas the domestics, particularly cow and pig, were more heavily used.

A further outstanding feature of the faunal resources at the sites was the relative number of species present at the sites and the total bone weights when pH was taken into consideration. Although more features and units were excavated at 38BK76 than at the other sites, and although Site 38BK76 had the highest pH and, therefore, the best potential for preservation, only four species were identified there, as compared to five at 38BK75 and eight at 38BK245. This disparity was also reflected in total bone weights. Site 38BK76 had 248.16 grams, while 38BK75 had 320.80, and 38BK245 had 1364.01. If the original amounts of bone at the sites had been nearly equal and equally distributed and the pH had been the same, 38BK76 would be expected to hav. the greatest amount of bone and greatest variety since more excavation was conducted there. If all factors had been equal except the pH, then 38BK76 could also have been expected to have had the most bone. It was concluded that there was either less bone at 38BK76 to begin with, or differential sampling resulted in a low bone count. The latter possibility can be discounted since virtually the entire site was excavated. This leaves the conclusion that 38BK76 simply had less bone than the other sites, and its inhabitants consumed less meat in their diet.

This could have reflected a difference in status and material comfort among the sites. Documentary evidence indicated that the owners of Curriboo were better off economically than those of Yaughan, and this appears to have been reflected in the slave population as well. This hypothesis is further corroborated by other differences noted in the architecture and artifact assemblages discussed above and in Chapter XII. Although it is impossible to directly compare amounts of seeds and bones, the relative lack of bone at all three sites compared to other historic sites (Otto 1976; South 1977; and Garrow 1981) indicated that meat sources did not play a large role in the slave diet. As noted above, the vegetal diet was probably fairly monotonous, and without significant amounts of meat, the overall diet would have been just as monotonous.

The apparent lack of meat in the slave diet ran counter to the idea that the gun parts at the sites reflected slaves hunting for their food. Three possibilities exist to explain the presence of the guns: that the overseer or owner used the guns exclusively, that slaves used guns exclusively, or that both owners and slaves used guns. The guns could have been used in one or more of a variety of situations. Documentary sources noted use of guns for hunting for food, killing or chasing pests attacking crops, and coercion on the part of the owners or overseers (Morgan 1977:42-43). To these may be added participation in armed conflict. The first two uses were often in the provenience of slaves, while the last two were not, in most cases. The most likely situation probably would have been slave or white use of guns for hunting or chasing away pests. Morgan (1977:42-43) points out that although the law prohibited more than one slave from using a gun for hunting per plantation in South Carolina, this law was often broken, and there was no limit on slaves having guns to chase away pests. It seems apparent that slaves did, indeed, use guns. The relative lack of wild faunal remains at the sites indicated that the guns were used to chase away pests and perhaps to provide wild game for the overseers or owners.

The idea that slaves had guns available to them and engaged in hunting for their masters is not new, as witnessed by the laws concerning gun by slaves use in the eighteenth century. However, the reemergence of this idea in the archaeological literature resulted in the hypothesis that wild game provided a mainstay in the slave diet. This hypothesis may have been influenced by Kenneth Stampp's (1956:284) remark that owners encouraged the slaves to "feast occasionally on wild game". Such an hypothesis runs counter to the majority of historical documents and the archaeological evidence provided by Otto (1977), Drucker and Anthony (1979), and now at Yaughan and Curriboo.

Conclusions

In summary, although it is unfortunate that preservation and disturbance prevented meaningful comparisons with Otto's (1976) work at St. Simons and South's (1977:179-182) bone ratio, some conclusions can be drawn concerning the subsistence of the slaves at Curriboo and Yaughan.

1. The diet was primarily vegetal with the domestics, corn and rice, being the mainstays of a rather monotonous diet.

2. The mainly vegetal diet was necessarily high in carbohydrates which could fuel hard manual labor, but lacked animal protein.

3. The meat diet was of secondary importance and depended primarily on domesticated cows and pigs.

4. The overall diet was partially supplemented with minor amounts of wild food sources, both faunal and botanical.

5. The variety and amounts of meat sources indicated a higher status or better material conditions for the slaves at Curriboo than at Yaughan.

A note of caution should be added here. It has been noted that the data presented on faunal remains, in particular, is potentially misleading as a result of difficulties of preservation. We feel confident that with respect to these difficulties, we have not gone beyond the data. However, there is a potential difficulty which is not often stressed by historical archaeologists. This difficulty is that of generalizing from individual sites. While it can be claimed, with some justification, that patterns can be detected in material culture, some parts of culture appear to lend themselves to general pattern studies better than others. A particular case in point is slave diet.

The historical literature is rife with contradictory statements concerning what slaves ate, how they ate it and where, and who controlled their diet. This is amply illustrated by a perusal of Stampp (1956:282-289), Rose (1964:122 and 123), Handler and Lange (1979?:86-89, 54, 73), Morgan (1977:42, 47-50), Hilliard (1972 and 1969:5), and Miller (1978). It seems apparent that what slaves ate, how much, when, how it was prepared, and whe er or not hunting was allowed or even encouraged depended upon individual masters. Some masters closely watched over slave diet providing (for the times) a balanced, but often uninteresting diet. Other owners did not. It is probably

safe to state that there were as many different slave diets as there were owners, at least in the eighteenth century. It could very well be that as the nineteenth century progressed, standardization on an elementary scale set in as a reaction to labor efficiency, agricultural journals, peer pressure, cotton growing, and even journalistic attacks by abolitionists.

However, future researchers should carefully examine the results of this project, especially with respect to subsistence, before generalizing to all slave quarters. It may be that the pattern presented here will be a common one on other plantations, but the variability in food procurement and diet illustrated in the historical literature indicates this will probably not be the case.

XI. PLANTATION LIFE

Introduction

Since the publication of Kenneth Stampp's The Peculiar Institution (1956) and Stanley Elkin's Slavery (1960), historians have wrestled with the problem of the nature and integrity of Afro-American culture. While the profession has by no means reached a consensus about antebellum black culture, major steps have been taken in the past decade with the publication of Peter Wood's Black Majority (1974), Stanley Fogel and Robert Engerman's Time on the Cross (1973), Eugene D. Genovese's Roll, Jordan, Roll (1974), and Herbert Gutman's The Black Family in Slavery and Freedom, 1750-1925 (1977). Despite serious disagreement among these scholars, all of them have endeavored to show the viability of black culture within the restrictions of the plantation system.

This project makes a substantial contribution to this discussion because of its scope, dealing with eighteenth century, low-country plantations, and because of the nature of its evidence. The artifacts can be seen as direct black testimony, which differs substantially from conventional historical sources that are typically white descriptions of black behavior. In this context, the historical component has treated the following questions:

1. What was the degree of cultural continuity in the slave quarters?
2. How does the historical literature on slavery help interpret the documents and the archaeology stemming specifically from the sites?
3. How does the project as a whole extend current understanding of slavery?

Question 1, which addresses cultural continuity, became the pivotal question for both the historical and archaeological components. The question of continuity is critical in the historical perspective in order to ascertain from purely historical considerations and questions the degree to which there was an autonomous or distinctive slave community that responded to and interacted with the white family. At the same time, the point needed to be established since continuity was assumed in the archaeological investigation, which enabled that inquiry to concentrate on relationships among the artifacts. Continuity is a complex question, requiring elaboration of its meaning and identification of factors that created, maintained or destroyed it. Partially in response to these abstract considerations, and partially in response to the documents that were available, the question was resolved into a series of subquestions. These included:

1. What was the size of the slave quarters?
2. What was the effect of purchase upon the slave community?
3. What was the effect of inheritance practices upon the slave community?
4. What was the effect of sale upon the slave community?
5. What evidence was there of family and kinship bonds among the slaves?
6. What evidence was there of perpetuation of Africanisms in the slave quarters from written evidence?
7. What evidence was there that slaves acted independently of their masters and were able to interact with whites on terms other than those that the whites dictated?

Plantation Life and Culture

In a now classic definition of the Southern plantation system, Lewis Cecil Gray linked the evolution of the plantation to staple crop agriculture and forced labor (Gray 1933). In South Carolina, "forced labor" meant first Indian and then predominantly black labor. The demographic components of the history of St. Stephen's Parish were discussed in Chapter III. Data presented in that chapter showed that the proportion of Indians in the slave population decreased after 1708, when it peaked at one-fourth of the total slave population. The average number of slaves imported from the West Indies and from Africa continued to grow, reaching its peak in the period 1735-1739. After a slump in the 1740s, importation of Africans again accelerated in the 1750s. The period during which the settlement of Yaughan and Curriboo Plantations took place thus coincided with the rapid expansion of Africans in the Carolina slave population. Although an occasional slave in the lists included in probate inventories was described as an Indian or more frequently as a Mustee, no information obtained thus far indicated that the constituency of these plantations differed radically from the mainstream, which was overwhelmingly African.

The following section treats the history of the slave population of Yaughan and Curriboo plantations and deals with the issue of continuity. Eugene D. Genovese's insightful research has shown that black and white history are two sides of the dialogue that constitutes Southern history (Genovese 1974:2). Therefore, this section will begin by discussing the parameters of white culture and will then proceed to a discussion of the black response and behavior within the limits imposed by the plantation.

White Occupancy

Evidence from the chains of title and the information on the family suggested that Yaughan was occupied in some way in the 1740s. Isaac Cordes' inventory listed tools and stock, but no slaves, at Yaughan in 1745 (Inventory of Isaac Cordes, 9 August 1745, Inventories, Vol. 67A, 1732-1746, pp. 316-332). When his son John, who inherited the plantation from his father, died in 1756, he left his entire estate including at least 51 slaves in the custody of his brothers-in-law (Will of John Cordes, Record of Wills, Vol. 7, 1752-1756, pp. 582-584). The account book from the trusteeship of Samuel Cordes, who also owned Curriboo Plantation in these years, survives and refers at several places to Yaughan.

Shortly after Samuel Cordes (d. 1796) took control of his brother-in-law's property and assumed guardianship of his children, he inventoried the estate. The inventory in 1764 listed 65 slaves, a growth of 14 slaves since the inventory in 1757 following John Cordes' death, and enumerated household goods at Yaughan worth sixteen pounds (colonial currency) (John Cordes Estate, Account Book, 1756-1798, p. 6, CC). In December of that year, Samuel Cordes (d. 1796) credited indigo worth £ 750 to the estate's account. Clearly, the plantation had been in production since John Cordes' death. It was an indigo

and possibly a rice plantation and had probably been in production in John Cordes' lifetime, i.e., prior to 1756. Evidently reviewing earlier accounts, Samuel Cordes (d. 1796) noted the purchase of "1/2 doz[en] broad Hoes for Youghan," amounting to four pounds, in May 1758 (p. 12) and the sale of indigo worth £ 984.14 "made at Yaughan" in December 1756 (p. 11).

The plantation was in the daily supervision of an overseer and possibly had been since Isaac Cordes acquired it in 1742. In Isaac Cordes' inventory, the appraisers noted cows, calves, working oxen and horses at Yaughan and "Sundries in Company with Peter Lequeux" (Inventory of Isaac Cordes, 9 August 1745, recorded 6 December 1749, Inventories, Vol. 67A, 1732-1746, pp. 328-331). The Lequeux family settled in St. James, Santee, and later resided in St. Stephen (Will of Peter Lequeux, Record of Wills, Vol. 14, 1771-1774, pp. 107-110; Misenhelter 1977:6). The reap hooks, spades, axes and hoes listed in this portion of Isaac Cordes' inventory are separate from other listings and follow an enumeration of items owned jointly with Thomas Cordes (d. 1748) at Curriboo. The livestock at Yaughan was explicitly identified as belonging to the plantation; it was listed <u>after</u> stock listed at Curriboo in the same way that the listing of items held jointly with Peter Lequeux followed the list of goods owned jointly with Thomas Cordes (Inventory of Isaac Cordes, 9 August 1745, recorded 6 December 1746, Inventories, Vol. 67A, 1732-1746, pp. 329-332). The structure of the document together with what was known about the individuals strongly indicated that the agricultural implements were located at Yaughan and that Peter Lequeux looked after the plantation as either a full-time overseer or from his own plantation in the neighborhood on a part-time basis. In 1762, Samuel Cordes paid Peter Lequeux, Jr., for nine months "overseeing at Youghan," which is additional evidence that the Lequeux family had a standing relationship with the Cordes family at their plantations in St. Stephen's Parish (John Cordes Estate, Account Book, 1756-1798, p. 14, CC).

The twelve yoke of oxen listed as being at Yaughan in 1745 suggest that the plantation had not been developed to a great extent. When Thomas Cordes, Isaac Cordes' brother, died in 1748, he left his sons six oxen each, together with plantation tools and a plantation. This implies that six oxen were essential to running a plantation. Having twice as many oxen, which were used as draft animals in clearing and ploughing the land, on Yaughan indicates that this was a "frontier" plantation. The absence of slaves also adds to the image of a "frontier" plantation that had been recently acquired and was in the early phases of operation. Assuming that the tools held with Peter Lequeux were being used on Yaughan confirms this impression but indicates that there were slaves on the plantation at least part of the year. Supporting the impression that this was a newly settled plantation is the fact that there were 2 <u>new</u> spades, 3 <u>new</u> axes, 10 old axes, 6 <u>new</u> narrow hoes, 6 <u>new</u> broad hoes, 1 <u>new</u> fanner and 1 new rice sieve listed in the inventory. There were in addition 22 reap hooks. The number of new implements suggests that the plantation was recently settled as does the number of spades and axes, which were used to fell trees. There were, in fact, more axes than hoes, which were a critical implement in eighteenth century agricultural practices. The configuration of implements, moreover, implies clearly that this was more than a forested tract on which cattle were run. The numbers of

tools indicate that there were a minimum of between 12 and 22 slaves of working age resident on the plantation at least part of the year. The rice sieve and hooks suggest plans for rice cultivation, either future (within one growing season), or for a crop already in the field.

After 1760, there is regular evidence describing events at Yaughan. In 1761, Samuel Cordes recorded payment for "making an Oven at Youhan" (John Cordes Estate, Account Book, 1756-1798, p. 14, CC); in 1769, he paid for "delivering four Wenches in Child bed at Yaughan" (p. 46), and in 1770, he had a "Chimney at Yaughan" rebuilt (p. 50). Between 1762 and 1774, he paid overseer's wages to five men: Peter Lequeux, Jr., Jonathan Dubose, Enoch Linerieux, Isaac Couturier and Isaac Barnes (pp. 14, 16, 24, 26, 46, 52, 55, 59). Four of these were members of old Huguenot families who had settled in St. Stephen and the fifth, Isaac Barnes, died resident in the parish. Samuel Cordes was one of the executors of Barnes' estate when he died in 1784. Barnes owned property worth over 400 pounds. This challenges the conventional image of the overseer as a servant of the plantation owner, wholly without property of his own. In January 1772, Isaac Barnes was paid "for one share of his in Negroes that Crop" implying that like Peter Lequeux in 1745, the overseer at Yaughan had made an investment in the running of the plantation (p. 55).

On May 5, 1774, Thomas Cordes acknowledged receiving his share of his inheritance from the custody of his uncle, Samuel Cordes (John Cordes Estate, Account Book, 1756-1798, p. 73, CC). There are no further references to overseers at Yaughan, and since Thomas Cordes formally purchased Yaughan from his elder brother John on May 10, 1775 (John Cordes to Thomas Cordes, Release of 3 Tracts of Land, 10 May 1775, recorded 7 April 1786, Deed Book R-5, pp. 193-196, RMC), this indicates that Thomas Cordes occupied the plantation and worked it himself. He stood godfather to Peter Porcher (b. April 10, 1777) in St. Stephen's in 1777 (John Cordes Estate, Account Book, 1756-1798, p. 190). In April 1778, the vestry of St. Stephen elected him churchwarden, a lesser parish office, but one, nonetheless, given to residents of the parish, and in 1785 he was elected to the vestry itself (Misenhelter 1977:56-57). Thomas Cordes married Charlotte Evance in 1784; he was then a member of the (state) House of Representatives, which was also an office conventionally reserved for influential men (Richardson 1942:152), and which also required residence in the parish. He was elected to the state constitutional convention in 1790, all of which adds to the impression of Thomas Cordes as a substantial resident of St. Stephen's Parish.

It is clear that Thomas Cordes participated actively in the Revolutionary War. Evidently, however, he did not leave St. Stephen's entirely. After the war, he apparently returned to the parish, where he settled with his wife and began to raise a family, again beginning the elite life of a planter. In 1785, he purchased a barrel of rice from Hezekiah Maham, a neighbor (H. Maham, Ledger, 1765-1794, p. 44, USC), and in 1787, he borrowed 1_ bushels of indigo seed from John Fitzgerald, another neighbor (Palmer Ledger, 1777-1807, p. 7, USC). Like other planters in St. Stephen, he seems to have tried to rebuild the old eighteenth century plantation on the basis of rice and indigo. It was not a wise decision and ultimately led to the sale of slaves. Thomas Cordes recognized that he was in bad straits, since in 1800, he sold 15 slaves to his sister-in-law Margaret Cantey with the stipulation that she hold the slaves in trust for his wife (her sister) Charlotte. When he died,

he still owned 47 slaves (Inventory of Thomas Cordes, 22 June 1807, Inventories, Book D, 1789-1810, p. 429, SCDAH). He had inherited 20 slaves from his father's estate (John Cordes Estate, Account Book, 1756-1798, p. 32, CC), so he clearly enjoyed a modest prosperity. Assuming that all of the 47 he owned when he died were alive in 1790 when he began to sell slaves, he held at least 86 slaves during his lifetime. It was not an inordinately large plantation, but according to Philip Morgan's estimates of the sizes of plantations in the low country, neither was it a particularly small one (see below, "The Black Community," for a discussion of sizes of plantations).

A document parallel to the Cordes account book detailing Yaughan is not available for Curriboo. There is other information in the accounts describing agricultural purchases and expenditures that is not linked specifically to Yaughan. Since this is data on the totality of John Cordes' estate, which included more property than Yaughan in both St. Stephen's and St. John's, Berkeley, this information can be construed to describe mid-eighteenth century plantation life in the Santee-Cooper region. It thus applies equally to Curriboo as to Yaughan.

Samuel Cordes was one of the founders of St. Stephen's Parish in 1754 and he was commissioned to make brick for building the parish church. The vestry rejected the bricks, considering them of inferior quality (Misenhelter 1977:6, 8). Samuel Cordes clearly resided in St. Stephen's on Curriboo, which he had inherited from his father in the 1750s, and he had possibly moved to the plantation as early as 1748, when his father died. The decision of his nephews John and Thomas Cordes to occupy plantations in St. Stephen's in the 1770s reflects the importance of kinship in determining patterns of residence and reinforces the impression that Samuel Cordes was continuously in residence in St. Stephen's Parish from the 1750s at least until the Revolution. In 1774 and 1789, however, he inherited significant holdings in St. John's, Berkeley, and when he died in 1796, he identified himself as residing in St. John's (Will of James Paul Cordes, Record of Wills, Vol. 18, 1776-1784, pp. 203-205; Will of James Cordes, Record of Wills, Vol. 23, Book B, 1786-1793, p. 414, SCDAH). Thus, in the mid-1770s, he may have begun to divide his time among his several plantations.

John Cordes' estate produced indigo, rice, pitch, corn, beef and peas. This pattern of mixed agriculture is consistent with what is known about other plantations in this area. In the 1770s, for example, Henry Ravenel of Hanover, in St. John's, Berkeley, produced beef, corn, indigo, rice and naval stores (Henry Ravenel, Ledger, 1760-1774, SCHS). During the Revolutionary War, members of the Cordes family supplied beef, corn and livestock to Francis Marion's and Hezekiah Maham's troops (Chapter V), and in the 1780s, Maham and members of the Palmer family continued to grow rice and indigo as well as corn, peas and oats (H. Maham, Ledger, 1765-1794; Palmer Ledger, 1777-1807, USC). The inference is plain, then, that Yaughan and Curriboo in the second half of the eighteenth century were primarily rice and indigo plantations with secondary investments in such subsistence crops and products as beef, hides, naval stores, peas and corn. Yaughan was smaller than Curriboo, housing perhaps 80-90 slaves at its peak between 1785-1790. Curriboo was more prosperous; when Samuel Cordes died, he had 103 slaves at Curriboo, almost one-fourth of his total of 408 slaves (John Cordes Estate, Account Book, 1756-1798, pp. 138-141).

At his father's death, Thomas Cordes, Jr. lived at Milford Plantation in St. Stephen's where he worked 82 slaves (John Cordes Estate, Account Book, 1756-1774, pp. 141-146, CC). Samuel Cordes explicitly willed Curriboo to his son Thomas, Jr., who evidently left Milford to live at Curriboo. He survived his father only three years, and when he died, he left his house in Pineville to his widow Rebecca (Will of Thomas Cordes, Jr., Record of Wills, Vol. 27, Book C, 1793-1800, pp. 504-507). He had apparently already begun to live part of the year in the village, and his widow evidently left the plantation entirely. She owned the Pineville property and was living in Charleston at the time of her death (Will of Rebecca Cordes, Record of Wills, Vol. 43, 1839-1845, pp. 680-683, CCPO). Her son James Jamieson Cordes left South Carolina permanently in 1821, and probably her son-in-law John Harleston, who had married her daughter Elizabeth in 1819, looked after the family property, since he owned plantations in St. Stephen's.

Charlotte Cordes also went to live at least part of the year in Pineville after Thomas Cordes' death in 1806. In 1814, she sold 28 slaves, and although she and the four of her children who lived in St. Stephen's in 1825 owned a total of 77 slaves in that year, the household at Yaughan itself may have already begun to break up by the mid-1820s (Comptroller General, Tax Returns, 1824, St. Stephen's Parish, SCDAH).

Economics of the Plantation

Philip Morgan argues that the decade of the 1740s constituted a watershed in the development of the plantation in St. John's, Berkeley. After the hard times of the decade, he argues, the planters consciously tried to promote self-sufficiency within the plantation (Morgan 1977:27-31). Morgan has, however, minimized the extent to which planters supplied each other in a parish-wide network of self-sufficiency. A network of local exchanges emerged within which the planters supplied each other with essential goods, ranging from items for the household to extra bushels of corn for the stock and seed. Clearly Thomas Cordes participated in such a circuit, since he obtained rice and indigo seed in the 1780s from his neighbors. These accounts also document purchases by Samuel Cordes, John Cordes and Francis Cordes (H. Maham, Ledger, 1765-1790, p. 44; Palmer Ledger, 1777-1809, pp. 6, 7, 50, and 74, USC), suggesting that the restricted scope of the exchanges meant that these transactions took place within the familiar matrix of neighbors and kindred.

Systematic analysis of Henry Ravenel's Ledger between 1760 and 1771 details this local commerce (Henry Ravenel, Ledger, 1760-1774, SCHS). In these years, he traded with six neighbors: William Moultrie, Daniel Ravenel, James Ravenel, Samuel Richebourg, Samuel Williams, and Stephen Mazyck. Two, Daniel and James Ravenel were kindred, and two, William Moultrie and Stephen Mazyck were in-laws. He dealt in tar, pitch, hides, beef, small quantities of indigo, tallow, bark and the rental of slaves. None of these items were part of the rice-indigo basis of the colonial economy, but all related to the daily functioning of the plantations. Kinship clearly informed these exchanges, and the picture that emerges reinforces the insular quality of life in the rural parishes.

The John Cordes Estate Account Book presents a better picture of the economics of the plantation in its relationship with other plantations and in its relationship with the larger economy. The book lists 112 transactions between 1756 and 1774. Of these, 68 list the name of the firm or the individual. Thirty-nine of these transactions took place between the estate and individuals and the remainder were between the estate and a firm in Charleston. In these exchanges with Charleston firms, six of the seven firms whose identity is known were also involved in the overseas slave trade (Higgins 1964:205-217). Exchanges with these firms concerned almost exclusively rice, indigo and corn in large quantities, and rarely did they involve small consumables (e.g., several bushels of corn or bottles of wine and rum) for the plantation. These firms acted as bankers for the members of the family. In 1767, Samuel Cordes noted the proceeds of Ł 350 paid to the estate's account with Livingston & Champney for the sale of one crop of indigo. Over 1200 pounds had been carried over to the estate's credit with the firm from the preceding year (John Cordes Estate, Account Book, 1756-1798, p. 26, CC).

These commercial transactions involving the plantation's viability over the long run were conducted in a separate circuit from those involving daily provisioning. As the analysis of the Ravenel Ledger implied, these took place almost exclusively among neighbors and kindred. There were 39 transactions with 25 individuals. They ranged from one-time exchanges to multiple exchanges, the most frequent of which was four (Table 64). These relationships, then, were fluid so that no permanent relationship existed between one or two individuals in the parish. Nine of these 25 men were neighbors, meaning that they were residents of St. Stephen's Parish; one was a kinsman, and two were in-laws (Table 65). Nearly half (12/25) were exchanges between men who already knew each other and already shared common bonds. As had been the case with kinship, marriage and locale, these economic exchanges served to reinforce the restricted scope of contacts and to heighten the insularity of the parish.

In 29 transactions, both the supplier and the item exchanged were known. In this analysis the two circuits become extremely clear (Table 66). Items having to do with consumption and provisioning the plantation, including supplying the slaves with goods, were almost entirely local. Eight of the nine exchanges of Negro goods involved neighbors, kindred or in-laws. The two exchanges involving poultry were between neighbors, and six of the nine transactions which involved primarily small quantities of beef or an odd steer were between the estate and neighbors. By contrast, the commercial exchanges, which were concerned with exports from the colony, did not involve neighbors. One exchange did take place between the estate and Samuel Prioleau, a merchant in Charles Town who married one of John Cordes' daughters. The pattern of marriages in the family leads to the conclusion that this was more or less an arranged marriage between Catharine and a merchant with economic links to the family.

Slaves occupied an ambiguous position in these circuits. On the one hand, six of the seven firms with which the estate dealt were also involved in the slave trade, implying clearly that the Cordes were in a position to acquire slaves through the Charleston markets. Since the acquisition of labor was critical to the survival of the plantation, obtaining slaves in this sense

TABLE 64. JOHN CORDES ESTATE, ACCOUNT BOOK, FREQUENCY OF TRANSACTIONS WITH INDIVIDUALS, 1756-1774

Number of Exchanges Per Individual	Frequency	%	Cumulative %
1	17	68	68
2	3	12	80
3	3	12	92
4	2	8	100
	25	100.0	100.0

Source: John Cordes Estate, Account Book, 1756-1798, CC.

TABLE 65. INCIDENCE OF BONDS AMONG PARTICIPANTS IN THE EXCHANGES, JOHN CORDES ESTATE, ACCOUNT BOOK, 1756-1774

	Frequency	%	Cumulative %
Neighbor	9	36	36
Kindred	1	4	40
In-Law	2	8	48
Unknown	13	52	100
	25		

Source: John Cordes Estate, Account Book, 1756-1798, CC.

TABLE 66. CROSS TABULATION, SELECTED ITEMS* BY INDIVIDUAL/FIRM, JOHN CORDES ESTATE, ACCOUNT BOOK, 1756-1774

Item	Total	Neighbor/Kin/In-Law	%	Other	%
Negro Goods	9	8	88.9	1	11.1
Beef & Steers	9	6	66.7	3	33.3
Poultry	2	2	100.0	0	----
Rice	1	0	-----	1	100.0
Indigo	4	0	-----	4	100.0
Corn	2	0	-----	2	100.0

* 2 items, 1 pair of shoes for a member of the family and 1 payment of commission were deleted.

Source: John Cordes Estate, Account Book, 1756-1798, CC.

was analogous to marketing indigo, rice and corn. On the other hand, provisioning slaves with shoes took place within the local circuit of exchange, implying that slaves, once acquired, were treated as inhabitants of the plantation that in many ways resembled a small village, whose care was a matter to be resolved locally. By implication, then, once on a plantation, a slave became nested in an insular mentality and his or her contacts were restricted to a relatively small area.

An analysis of Henry Ravenel's Day Book offers a closer look at the internal functioning of the plantation (Henry Ravenel, Day Book, 1763-1766, SCHS). His ledger and the John Cordes Estate Account Book reflect the ebb and flow of credit for the plantation as a whole. Figure 87 represents three-month moving averages for the frequency of expenditures by month, aggregated for the period 1756-1774. Expenditures peaked in frequency of record in December, suggesting that at the end of the year, the plantation master sat down with his numerous bills and receipts and brought his account to date, calculating his expenditures against the credit he had obtained as a result of the sale of the crops, which had been brought in by the end of November. This pattern does not necessarily reflect the time when the slave actually received the items or when the plantation itself may have received or sold the items.

Ravenel's Day Book, on the other hand, was a private record that he kept on a more frequent basis detailing mainly small transactions, principally within the Hanover Plantation itself. There is some overlap with the Ledger, but the exchanges noted in the Day Book largely concern Ravenel's trading with his slaves. These transactions were exclusively in cash and were very small; the mean value was £ 1, 6s. Transactions seem to have involved slaves on neighboring plantations as well as those from Hanover. The slaves purchased relative luxuries, including flannel and rice, and appear to have supplied the product of their own husbandry, skill or ability to forage (Table 67). Sixty-three percent involved sale of fowl, hogs and corn; 18.5 percent involved supplying skills (i.e., mending a chair or table) or a product of skill (making a basket or a tub). Finally, 18.5 percent reflected the slaves' ability to exploit the environment for fish, honey or wood.

Other records of plantations in St. Stephens and St. John's, Berkeley echo this pattern. The whites supplied certain basic items, such as blankets, shoes and corn, but this was not exclusively a provisioning, and the slaves elaborated on these staples. Thus, one of the Palmers noted "A list of Negroes took out Blankets in December 1796," the verb "took out" implying an element of slave participation rather than a strict distribution of supplies by the whites (Palmer Ledger, 1777-1809, p. 1, USC). Thomas Walter Peyre, of St. Stephen's, on the other hand, recorded giving out corn for the horses on May 17, 1843, for Negroes on May 29, 1843, and for hogs, fowls, and horses on June 5, 1843 (Thomas Water Peyre, Journal, 1834-1850, p. 205, SCHS) on the same page of his ledger reserved for "Corn Used from the Corn House." Peyre may have been particularly systematic, but an unidentified member of the Ravenel family commented in April 1830 that he planted cotton at Pooshee and "gave out 560 yards of colored homespun to the negros for summer clothes" (Thomas Porcher Ravenel, Papers, Crop Book for Planting, 1830-1832, SCHS). Slaves, however, evidently made their own clothes from the dry goods supplied, and also augmented their diet. In 1833, Ravenel carefully recorded

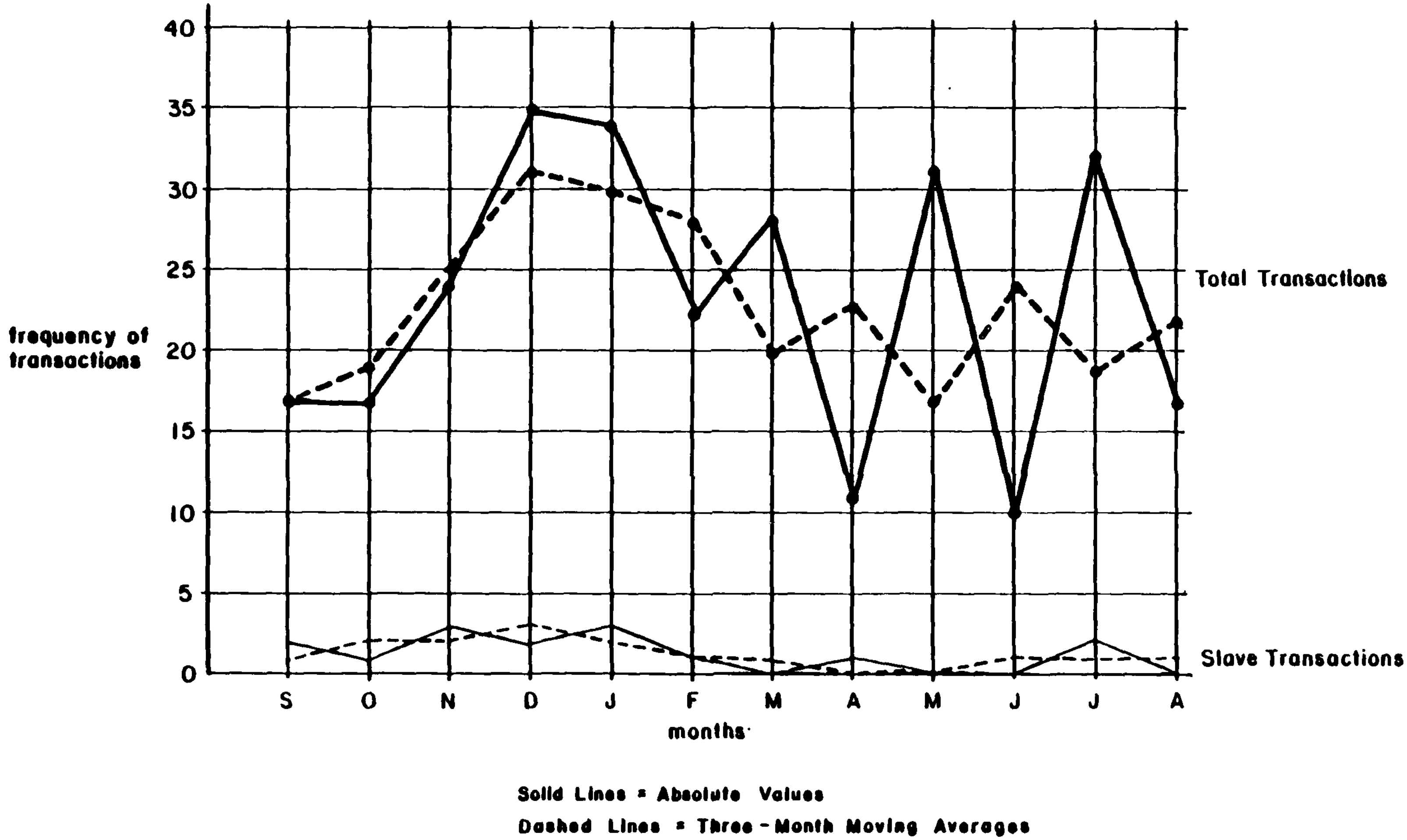


FIGURE 87
Number of Transactions
By Month 1756-1774
Henry Ravenel's Day Book

TABLE 67. Goods and Services Supplied
Henry Ravenel of Hanover by Slaves, 1763-1766

Item	Frequency	Cumulative Frequency	Percent	Cumulative Percent
Fowl	10	10	37.0	37.0
Hogs	4	14	14.8	51.8
Corn	3	17	11.1	62.9
Mending Chair	1	18	3.7	66.6
Mending Table	1	19	3.7	70.3
Bricklayer	1	20	3.7	74.0
Tub	1	21	3.7	77.7
Basket	1	22	3.7	81.4
Catfish	1	23	3.7	85.1
Honey	1	24	3.7	88.8
Trees	1	25	3.7	92.5
Rails	2	27	7.4	99.9*
Total	27	27	100.0	100.0

* Error due to rounding.

Source: Henry Ravenel, Day Book, 1763-1766, SCHS.

the meat that slaves kept in the plantation smokehouse. He listed both debts he owed them for fowls he had taken and debts they owed him for meat they had "purchased." In still another fragmentary list, he recorded "Money due me from Negroes for items purchased," which included cards, a waistcoat, kerchiefs, calico and the entry, "Lucy at Ophir for a lock" (Thomas Porcher Ravenel, Papers, "Money due me from Negroes for articles purchased," June 1829-1833, SCHS).

The late eighteenth century pattern manifested in Henry Ravenel's Day Book is amply reflected in these additional documents. The uneven dialogue between master and slave illustrates the cruel contradiction that David Brion Davis has argued lay at the center of slavery, namely, that the slave was simultaneously chattel property and human being (Davis 1964:60-62). The whites proved unable to ignore the human in the interests of the property, and tacit recognition of black humanity crept into exchanges on the plantation. The substance of these exchanges, the Ravenel papers show, suggest that part of the plantation's self-sufficiency was the result of the slaves' input, apart from their forced labor in the fields. Secondly, the demands of the plantation exercised the slaves' abilities and elicited responses that might have perpetuated Africanisms (i.e., basket-making) and fostered the slaves' sense of community within and identification with the plantation.

The Impact of Inheritance and Sale

Occupancy and provisioning were not the only white behaviors that circumscribed black experience. Inheritance strategies, linked obviously to occupancy, and sale also affected the formation of a slave community, and with the community the conditions which contributed to maintaining African practices. Wills and inventories have survived for four male members of the Cordes family: Isaac Cordes (d. 1745), his son John Cordes (d. 1756), Isaac's brother Colonel Thomas Cordes (d. 1748), and his son Thomas (d. 1763). Additionally, Henrietta Catherine Cordes' (d. 1765) will and inventory are available. These documents are extremely useful because they form a twenty-year unit of related individuals. The John Cordes Estate Account Book also supplies relevant information on inheritance practices and their impact on slaves as well as useful data on sales that took place within the family. Finally, bills of sale in addition to Samuel Cordes' (d. 1796) will and inventory, Thomas Cordes' (d. 1799) will and Thomas Cordes' (d. 1806) inventory have survived, constituting a block of documents for the turn of the century. A list of slaves was also attached to Elizabeth Cordes' (Samuel Cordes' granddaughter) marriage settlement of 1819.

One of the great advantages of having both wills and inventories for the same people is that the terms of the division of property are known as well as a precise account of the testator's personal property. This made it possible to determine population at risk and to provide a check on the record linkage of slaves from inventory to inventory. All of this information has been tabulated in Table 68, and since the same procedure was followed on each pair of documents (will and inventory), only the sequence followed in analyzing Isaac's relationship with John will be detailed.

TABLE 68. Transmission of Slave Property by Inheritance, 1745-1765

Name	Date	Total Slaves	Slaves At Risk To Be Willed	Slaves At Risk Per Heir	No. Slaves Found	No. Found / No. At Risk To Be Found	No. Inherited	No. Inherited / No. At Risk To Be Inherited	No. Inherited / Total
Isaac Cordes	1745	128	114	28-29	3	32/40 = 80.4%			
Colonel Thomas Cordes	1748	127	119	20	39	39/42 = 92.8%			
John Cordes	1757#	51					25 31*	25/29 = 86.2% 6/20 = 30.0% 31/49 = 63.3%	52.1% 64.6%
Thomas Cordes	1763	69					21	21/22** = 95.5%	30.1%
Henrietta Catharine Cordes	1765	30					18	18/20 = 90.0%	60.0%

Although John Cordes died in 1756, the inventory was taken in 1757.
* Includes slaves from his father-in-law.
** Assumes ± 10% in slaves at risk to be inherited from his father.

TABLE 68. (Continued)

Sources: Will of Isaac Cordes, recorded 9 August 1745, Record of Wills, Vol. 5, 1740-1747, pp. 406-409, SCDAH.

Inventory of Isaac Cordes, 9 August 1745, Inventories, Vol. 67A, 1732-1746, pp. 316-332, SCDAH.

Will of Thomas Cordes, 25 April 1748, recorded 21 April 1749, Record of Wills, Vol. 6, 1747-1752, pp. 141-145, SCDAH.

Inventory of Colonel Thomas Cordes, 21 April 1749, Inventories, Vol. B, 1748-1751, pp. 124-129, SCDAH.

Will of John Cordes, 20 June 1756, recorded 3 December 1756, Vol. 7, 1752-1756, pp. 582-584, SCDAH.

Inventory of John Cord[e]s, 22 January 1757, Inventories Vol. S, 1756-1758, pp. 22-28, SCDAH.

Will of Thomas Cordes, 22 May 1762, recorded 6 July 1763, Vol. 10B, 1760-1767, pp. 450-452, SCDAH.

Inventory of Thomas Cordes, Undated, Inventories, Vol. V, pp. 492-494, SCDAH.

Will of Henrietta Catharine Cordes, 15 May 1760, recorded 31 December 1764, Record of Wills, 1760-1764, pp. 442-444, SCDAH.

Inventory of Henrietta Catharine Cordes, 10 January 1765, Vol. W, pp. 221-222, SCDAH.

Isaac Cordes left a slave to each of his three daughters, and the remainder of his personal property he divided equally among his son and three daughters. The appraisers listed 114 names and prices in the inventory of Isaac Cordes' estate and an additional 11 slaves held with the Curriboo property. Isaac Cordes owned 117 slaves outright and perhaps as many as 128. Since there is no mention of the Curriboo property in the will, and since the slaves named in the will did not appear in the inventory, the population at risk to be bequeathed, divided among the four children, was 114. The population at risk to be inherited by any single heir was 114/4 or 28-29.

John Cordes (d. 1756) died 12 years after his father. His estate, when appraised in 1757, included at least 51 slaves, although some ambiguities suggest that the number was slightly higher. Three were clearly children (Little Janny, Little Grace and Little George). Linking names from Isaac's inventory to John's and checking price as an indicator matched 25 names. This empirical exercise came extremely close to the predicted estimate of 28-29, which did not take mortality or relative values into account; the appraisers divided slaves so that values were equal, not the size of the lots of slaves. John Cordes also inherited slaves from his father-in-law Thomas Cordes by right of his wife (who was also his first cousin). Six slaves were a possible match. Since three slaves were apparently children, 48 slaves were at risk to have been inherited in the population of John Cordes' estate in 1757. Thirty-one slaves were possible links with other records, and therefore 31 out of 48 slaves at risk were inherited slaves, or 64.6 percent.

This procedure was replicated for each documented relationship: from Colonel Thomas Cordes to his son Thomas, from Colonel Thomas Cordes to his wife Henrietta Catharine; and from Isaac Cordes to his brother Colonel Thomas with regard to the slaves held at Curriboo. Seven of the 11 slaves known to have been at Curriboo in 1745 show up in Colonel Thomas Cordes' estate in 1748. Seven of the eight slaves identified in Colonel Thomas Cordes' will appear in the inventory of 126 slaves. The total number in the estate was 127, but the population at risk to be bequeathed according to the terms of the will was only 119 because eight were earmarked specifically to individuals. He left 1/6 of his personal property to his wife and the remainder in fifths to his five children. Between 19 and 20 slaves were at risk to appear in his wife's inventory, and 20 were at risk to show up in his son Thomas' inventory.

In 1763, Colonel Thomas Cordes' son Thomas died, leaving 76 slaves. Of these, seven were clearly children, and therefore, the population at risk to have been inherited was 69. Twenty-one slaves were a possible match, which exceeds the predicted size, although it is close. There are several possible explanations. Thomas may have inherited a larger number of children from his father, and, although the value of his portion would have equalled the values of his siblings' lots, there would have been a larger population at risk. Slaves tended to name their children for kin, frequently fathers (Gutman 1976:190-201), and therefore, the linkage may have matched too many names, assuming then that the linked name was that of a child and the name to which it was linked in the 1745 inventory belonged to a slave who went to another lot. At any rate, clearly the empirical linkage and the prediction are sufficiently close to validate the method as a means of assessing relationships between lists of slaves, although the statistics must not be construed as a precise measurement of actual fact. Slightly more than 30 percent (30.4%) of Thomas Cordes' (d. 1763) slaves were inherited.

Henrietta Catharine Gendron Cordes' estate was less complicated. She owned 30 slaves when she died in 1765, and was in a position to have inherited property from her father as well as from her husband, Colonel Thomas Cordes. Considering only the slaves that she may have inherited from her husband, she stood to inherit a possible 19-20 slaves. Eighteen names match, so that 60 percent of her slaves were inherited.

These relationships can be viewed in two directions. On the one hand, the continuity from the testator to the heir can be measured. Out of all of Isaac Cordes' slaves, how many were tracked to later owners within the family, and by implication, how many disappear, presumably sold? On the other hand, the numbers can be construed from the perspective of the heir. Of his/her total estate, how many were inherited, and how many did he/she acquire from potentially distant sources? The earlier analysis indicated that members of the Cordes family dealt with firms in the overseas slave trade and hence the conduit with Africa is undeniably linked with their plantations.

The concept of population at risk again comes into the analysis. Since not all heirs were considered, the total population at risk to be divided is not equal to the population at risk to have been inherited, when considering the situation from the testator's perspective. Thus, a total of 32 slaves belonging to Isaac Cordes, including those he had an interest in at Curriboo, were discovered in either Colonel Thomas Cordes' inventory (7) or in his son John's inventory (25). Using the assumptions outlined above, that 114/4 was the population at risk per heir enumerated in Isaac Cordes' will, and that the slaves held at Curriboo were handled separately between the estate and Colonel Thomas Cordes, the population at risk to reappear in the documents at hand (Colonel Thomas Cordes' inventory and John Cordes' inventory) was 29 + 11 = 40. Of these, 32, or 80.4 percent, resurfaced in later documents; this is an extremely high degree of continuity from the perspective of the testator's slaves. A similar procedure involving Colonel Thomas Cordes' estate shows 92.8 percent of the 42 slaves at risk to appear in Henrietta Catharine's and Thomas Cordes' inventories do, in fact, match.

Viewing the transactions in the context of the three heirs' estates presents a somewhat different picture. In John Cordes' total estate, slaves known to have been inherited constituted 64.4 percent of his slave population, at risk to have been inherited. In Thomas Cordes' estate, they constituted 30.4 percent of his slaves, and in Henrietta Catharine Cordes' estate, they constitute 60.0 percent of her slaves. A series of factors may have affected the relationship; these were time elapsed between inheritance and death of the heir, relationship between testator and heir, and size of the heir's estate. Logically, one would expect the heir who survived the testator by the greatest number of years (Henrietta Catharine, surviving her husband, Colonel Thomas Cordes, by 17 years) to have the lowest percentage of inherited slaves; in fact, she had the highest percentage. As a woman and a widow, she was, however, in the least advantageous position to pursue aggressively a planter's life, and she also had the smallest number of slaves in her estate. "Relationship," a nominal designation which can not be analyzed in an equation with interval-scale data without a computer programmed with Multiple Classification Analysis, was not fed into this simple bivariate analysis. A correlation between total slave population on the plantation and percentage inherited shows, though, that there is a strong negative correlation (-0.9)

between size and percentage inherited. This is a time-series analysis, which usually produces high correlation coefficients. Therefore, the negative correlation, while undeniable, is probably inflated.

Even with the caveats of the preceding paragraph in mind, there are several points evident here. First, the position of the father influenced the position of the son, as would be expected. Applied only to slaves, conservation of property within the family meant that slaves were also protected, since ownership of slave property was strongly influenced by systems of inheritance. Thus, an amazingly high percentage of a testator's slave property reappeared in the estates of his heirs. As the heirs prospered, though, the impact that the father's slaves had on his son's slave property diminished. Patrimony in slaves, so to speak, became the basis of a slave quarter but not necessarily the totality of it, since the larger the slave population, the more likely it was that there were "foreign" (i.e., slaves obtained from sources outside of his own family) slaves in it. It is entirely likely, too, that these slaves were foreign not only to Cordes' properties, but to the colony as well. Between 1752 and 1756, slave imports to Charleston grew by 566.0 percent, and between 1757 and 1762, slave imports to Charleston grew by 20.0 percent (Bentley 1977:69, 74). Early in the eighteenth century, South Carolinians had begun to import slaves directly from Africa, and hence, the majority of these imported slaves very likely came from Africa and not from one of the other mainland or island colonies (Curtin 1969:145). Finally, kinship among whites affected the distribution of property, including the black population. In this case, inheritance customs contributed to continuity in ownership of slaves and hence to the stability of the slave community.

It is evident that heirs did not sell the slaves that they inherited. In the John Cordes Estate Account Book, in fact, there is clear evidence that Samuel Cordes deliberately maintained the integrity of John Cordes' slave population. According to the terms of John Cordes' will, the estate was to be kept together until the occasion of his daughters' marriages or until his sons reached their majority.

When Elinor Cordes married Theodore Gailliard in 1764, a total of 14 slaves were drawn off and turned over to her husband. Three years later, Catharine Cordes married Samuel Prioleau, a merchant in Charleston. Prioleau sold the 13 slaves he obtained by right of his wife back to Samuel Cordes, who acted on behalf of the John Cordes estate and divided the Prioleau lot between the two remaining heirs, John and Thomas Cordes (John Cordes Estate, Account Book, 1756-1798, pp. 8, 30).

It is equally as likely that Samuel Cordes was concerned with protecting the integrity of the estate, as that he repurchased these slaves out of concern for bonds among the slaves. In order to explore the question of how conscious whites were of bonds among blacks and how interested they were in maintaining and protecting those bonds, relationships among the slaves in John Cordes' estate, whose names are known, were investigated. Herbert Gutman, in his critical book, The Black Family in Slavery and Freedom, 1750-1925, demonstrated that patterns in slave names are a key to familial relationships among slaves, since slaves tended to name their children for their kindred, particularly for their male kindred (Gutman 1976:189-190). Considering only namesakes in the five lots of slaves selected from John

Cordes' estate, names from one list that matched with names on the same or another list were considered to mark a kinship relation. No effort was made to guess the nature of the relationship beyond inferring that the prefix "Little" meant a child, "Young" meant a young or middle-aged adult, and "Old" meant a grandfather or grandmother.

These assumptions obtained the following results. No namesakes were divided in the widow's share, withdrawn in 1764. In the Gailliard share, also withdrawn in 1764, three slaves, who were evidently prime or elderly, were separated from namesakes and two women were kept together. In the Prioleau share, separated out in 1767, three slaves were separated from namesakes. When this share was divided between John and Thomas Cordes, two, a woman and a child, were not reunited with their namesakes, and one, Old Harry, was put back in the lot that contained Little Harry. Both Old Harry and Little Harry were separated from Big Harry, who was probably the adult, father to Little Harry and son to Old Harry. Since John's and Thomas' lots came last, several separations had already been made. Five slaves in John's lot had already been parted from namesakes, and one new separation was made when drawing off his share in 1768. In John Cordes' share, there were at least two sets of namesakes, although one of these sets was a grandfather/grandson relationship. Four slaves in Thomas' share were also separated from namesakes, and two slaves, Old Culley and Little Culley, possibly grandparent and grandchild, remained together.

There is ample evidence in the wills and other plantation records that testators were aware of relationships among the slaves. The Ravenels' various lists of slaves recorded the births of slave children, noting both father and mother. Henry Ravenel, moreover, organized his slaves according to the plantation on which they lived and the way in which he had obtained them. Thus, he kept the records of the slaves inherited from his father René separated from other records of slaves (Check Book of Slaves, 1771-1850, Thomas Porcher Ravenel, Family Papers, 1731-1906, SCHS). Among the Cordes, references in the wills clearly recognize bonds among the slaves. Thomas Cordes (d. 1762) left his wife Ann several slaves including Mustee Molley "and her Child Lippelle." James Cordes (d. 1789), who died without children, left his grandnephew William Cordes the woman Joan and her four children, which he named, and Fanny and her two children, which he also named. Samuel Cordes himself left his wife two carpenters and the "house servant Martha and her children" (Will of Thomas Cordes, Record of Wills, Vol. 10, Book B, 1760-1767, p. 450; Will of James Cordes, Record of Wills, Vol. 23, Book B, 1786-1793, p. 414; Will of Samuel Cordes, Record of Wills, Vol. 26, Book B, 1793-1800, p. 506, SCDAH).

The tendency to leave slave women and their issue to an individual was one means by which women and their young children, at least, tended to stay together, facilitating the identification of black women with their children. Thomas Cordes, Jr. (d. 1799) left his daughter Elizabeth his seamstress Satyrah and her issue (Will of Thomas Cordes, Jr., Record of Wills, Vol. 27, Book C, 1793-1800, p. 960). When Elizabeth married in 1819, Satyrah "and her issue Dinah and Tony" appeared in the list of slaves attached to her marriage settlement (Marriage Settlement of Elizabeth Cordes, Marriage Settlements 8, p. 38-41, SCDAH). As the Ravenel records indicate, white masters were also aware of relationships between fathers and their families, and in 1799,

Thomas Cordes, Jr., explicitly bequeathed to his son James "my Driver Mush and his wife Dinah and her youngest child" (Will of Thomas Cordes, Jr., Record of Wills, Vol. 27, Book C, 1793-1800, p. 960).

The slave family is discussed in greater detail in the following section, since family is critical to discussion of stability and the internal workings of black life. It is important in this context to observe, however, that whites clearly recognized black family organization but did not respect it entirely when the needs of the estate were considered. The practices which exceeded the dictates of a given individual and, in fact, influenced the decisions he made (e.g., kinship, localism) worked to restrict the damage to black bonds that divisions might have made. Thus, white inheritance practices tended to stabilize slave ownership within the extended white family, although they possibly affected the immediate slave population from plantation to plantation. Since the extended white family tended to group their plantations within a restricted geographic area in the late eighteenth century, dislocation among blacks was not as drastic as it might have been. Finally, the pattern of divisions evident in separating out lots in John Cordes' estate indicates that although the nuclear family's bonds between parent and child were strained, the bond between grandparent and grandchild could be preserved when the former was broken. The pattern of division, therefore, was conducive to the preservation of an extended black family within a restricted area although the nuclear family was attenuated. Allan Kulikoff has found a similar pattern of limited dislocation in the seventeenth century and early eighteenth century Chesapeake. By the 1730s, he argues, slave kin networks had begun to take shape and over time, "short distance sale and estate division spread kin groups over the county" (as summarized by Gutman 1976:342).

The preceding discussions related to the impact primarily of inheritance strategies on the slave populations. In the early nineteenth century, Thomas Cordes (d. 1806) and his heirs began to sell slaves off. Some of the bills of sale have survived, listing different kinds of information about the slaves.

Table 69 summarizes the available information for these six transactions. In 1790, Thomas Cordes sold two slaves to two Charleston merchants. Eight years later, he sold 22 slaves to Catharine Cordes of St. John's, Berkeley, probably his mother, who was living in St. John's at that time. In 1800, he sold his sister-in-law 15 slaves, under the restriction that she hold them on behalf of his wife, and in 1814, Charlotte Cordes sold 28 slaves to Philip Porcher on behalf of the estate of Thomas Cordes. Dr. Samuel Cordes, the son of Thomas and Charlotte Cordes, who was living in Santee, mortgaged 63 slaves to Gibby and Waring, including all slaves known to have been inherited from his mother's estate, and probably in 1836, M. Catharine Cordes sold Solomon Clarke 18 slaves.

Four of these six exchanges were either within the parish or involved kin in the parish or the two adjoining parishes. The eighteen slaves sold to Clarke were probably resident on Yaughan, and thus, ownership followed slave residency, since he purchased Yaughan in January 1836. In the case of Dr. Samuel Cordes, when he moved to Santee, another adjoining parish, he evidently took

TABLE 69. Bills of Sale and Mortgage, 1790-1836

Year	From	To	Identification	No. of Slaves
1790	Thomas Cordes, of St. Stephen's	Timothy Ford William Henry DeSaussure	Merchants of Charleston	2
1798	Thomas Cordes, of St. Stephen's	Catharine Cordes	Mother, St. John's, Berkeley	22
1800	Thomas Cordes, of St. Stephen's	Margaret Cantey	Sister-in-law, St. Stephen's	15
1814	Charlotte Cordes for Estate of Thomas Cordes	Philip Porcher	Planter, St. Stephen's	28
1834*	Dr. Samuel Cordes, of St. James, Santee	Gibby & Waring	Bank of South Carolina	63 (13)
[1836]	M. Catharine Cordes, of St. Stephen's	Solomon Clarke	Planter, St. Stephen's	18

* Mortgage of 63 slaves; 13 match with slaves known left to him in Charlotte Cordes' Will (Will of Charlotte Cordes, 12 June 1826, recorded 26 May 1827, Record of Wills, Vol. 37, 1826-1834, pp. 238-241, SCDAH).

Sources: Miscellaneous Records, Vol. OOO, pp. 270-272, SCDAH.
Miscellaneous Records, Vol. 50, p. 239, SCDAH.
Miscellaneous Records, Vol. LLL, p. 40, SCDAH.
Miscellaneous Records, Vol. ZZ, p. 137, SCDAH.
Miscellaneous Records, Vol. 5R, p. 147, SCDAH.
Miscellaneous Records, Vol. 3W, p. 255, SCDAH.

his share of the estate's slaves with him. Only two slaves were sold away from the area and from the circle of kindred/neighbors. Sixty-one (excluding the 13 slaves known to have gone from Charlotte Cordes to her son Dr. Samuel Cordes) stayed within the familiar circle of kindred and neighbors. This early nineteenth century pattern of sale echoes the restricted network of exchanges of the mid and late eighteenth century. In this instance, as had been the case with inheritance customs, it was conducive to stabilizing the pool of slaves who resided in a limited area although the community of slaves on a single plantation might suffer periodic, short-distanced dislocation.

The Black Community

The preceding parts of this section detailed practices among the whites that defined the boundaries of the slaves' world: occupancy, provisioning and ownerships. Conventions bounding white behavior, namely localism and kinship, were found to have profound impact on the slaves' experience. Both heightened the insularity of the parish, which was reinforced by the economic autonomy of the plantations. The black majority was relatively insulated from the greater white world, and the degree of independence and travel blacks did enjoy facilitated communication within the slaves' neighborhood of plantations. This softened the impact of sales of slaves within the parish or between adjoining parishes and is consistent with a pattern that strengthened, according to Herbert Gutman, an African identification with the wider kinship network (Gutman 1976:211-212). The slaves owned by the Cordes family in the eighteenth century have not left a written record to confirm or contest Gutman's link between demographic characteristics and the perpetuation of African conception of the family. The preceding part of this section has, however, shown that the demographic pattern Allan Kulikoff described among slaves in the colonial Chesapeake was replicated in this stretch of the low country.

The relationship between the slaves' world and the greater colonial horizon is one side of the historical record. The other is the internal structure of the black community. Philip Morgan's dissertation is a rich source of demographic information and supplies a comparative framework for information derived from the Cordes family papers and other documents describing St. Stephen's Parish. Since the Cordes' inventories did not consistently indicate the relative age of the persons listed, a reliable age structure of the black population could not be obtained. Much of Morgan's analysis was, therefore, not repeated in this project. The documents do produce the following categories of data: size of plantation, male/female ratios, family size and frequency of family size.

Table 70 summarizes information relating to the size of slave populations on the plantations owned by members of the Cordes family over time. Morgan estimates that the typical eighteenth century South Carolina plantation housed from 50 to 62 slaves. In the 1730s, half of the slaves lived on plantations with 20-50 slaves, and by the 1770s, half of all inventoried slaves resided on large plantations. The change that he observed concerned the disappearance of the relatively small slaveholding operation and the consolidation of larger holdings over the course of the eighteenth century (Morgan 1977:1, 4, 7). Ownership relates more to the stratification of the white population owning slaves. More important for ascertaining the perspective of

TABLE 70. Slave Demography in Cordes' Inventories, 1745-1806

	Year	Owner	Size	Men:Women
(1)	1745	Isaac Cordes	114	1.6:1
(2)	1749	Col. Thomas Cordes	148	1.1:1
(3)	1757	John Cordes	53	1.3:1
(4)	1764	Estate of John Cordes	65	1.3:1
(5)	1764	Thomas Cordes	74	1.3:1
(6)	1765	Henrietta Catharine Cordes	30	1.3:1
(7)	1796	Samuel Cordes*	408	1:1.06
(8)	1796	Thomas Cordes Jr.**	82	1:1.05
(9)	1796	Curriboo Plantation	103	1:1.4
(10)	1807	Thomas Cordes***	47	1:1.04

* Represents Samuel Cordes' entire holdings.
** His slaves at Milford.
*** Thomas Cordes owned Yaughan.

Sources: Inventory of Isaac Cordes, 9 August 1745, Inventories, 67A, 1732-1746, pp. 316-332, SCDAH.

Inventory of Colonel Thomas Cordes, 21 April 1749, Inventories, Vol. B, 1748-1751, pp. 141-145, SCDAH.

Inventory of John Cordes, 22 January 1757, Inventories, Vol. 5, 1756-1758, pp. 22-28, SCDAH.

John Cordes Estate, Account Book, 1756-1798, pp. 1-2, CC.

Inventory of Thomas Cordes, Undated, Inventories, Vol. V, pp. 492-494, SCDAH.

Inventory of Henrietta Catharine Cordes, 10 January 1765, Vol. W, pp. 221-222, SCDAH.

John Cordes Estate, Account Book, 1756-1798, pp. 134-146, CC.

Inventory of Thomas Cordes, 22 June 1807, Inventories, Book D, 1789-1810, p. 429, SCDAH.

the slaves is the fact that over the eighteenth century, South Carolina's black population became concentrated in a limited area, maximizing blacks' opportunities for contact with each other. Thus in 1720, 82 percent of the colony's slaves lived in parishes that were over 60 percent black, which included St. John's, Berkeley, and 43 percent lived in parishes that were over 70 percent black. By 1790, all but two of the lowland parishes were over 70 percent black, and these parishes comprised 85 percent of all the state's slaves. Black population density was highest in the Santee region, which included the Parish of St. Stephen (Morgan 1977:4, 7). Clearly, the slaves owned by the Cordes family resided in a demographic setting similar to that of the majority of black South Carolinians, although their white masters represented an elite segment of the white population (see above, "The Ownership of Slaves").

The continuity in ownership demonstrated earlier indicated that the slave communities on these plantations were not entirely determined by slaves a slaveowner inherited from the parent generation. Rather, growth was probably brought about in the 1750s by acquiring slaves who were very possibly recently imported from Africa, and through natural increase. The conclusion has two significant features. First, the chance for discontinuity as a result of sale was small, and second, importation provided re-contact with Africans for slaves born in South Carolina. Working from another perspective, Morgan also found less likelihood for dislocation among slaves on the nature of South Carolina's staple. "In South Carolina," he writes, "the combination of large landholdings and the non-exhaustive nature of the rice crop meant that slaves and their descendants had more chance to remain on the same plantation than was the case in Virginia" (Morgan 1977:16).

Table 70 is misleading in that it suggests that slave ownership declined over time. Instead, the numbers of slaves owned by Isaac Cordes' son and grandson (column (3) and column (10)) declined, but those owned by Colonel Thomas Cordes' descendants increased. This had as much to do with a series of deaths of men without sons to inherit as it did prudent investment. Samuel Cordes, for example, died in 1796 possessed of several plantations and sets of slaves because of fortuitous inheritances from his brothers and uncle. His total of 408 slaves was divided among several plantations. The table does indicate the range of slaveholdings in the family, and indicates that in St. Stephen's, plantations worked by the same family varied in size. Even the smallest of these operations, the 47 slaves owned by Thomas Cordes at Yaughan in 1806, was well into the category of large plantations. Traditionally, the benchmark is 20 slaves, although plantations in South Carolina tended to be much larger.

Calculation of the size of the plantation slave communities was a preliminary step in calculating the ratio of men to women in the slave community. Except for Curriboo in 1796, the ratio tended to equalize over the century. This is consistent with Morgan's findings. In the 1730s, the imbalance between men and women was greatest, reflecting the preference for African males in the importation of slaves. This preference was also responsible for the low rate of natural increase in the black population. Later decades, however, were not as seriously affected, despite the massive influx of Africans in the 1750s. The 1760s and 1770s, therefore, saw a high rate of fertility that offset the effect of importing slaves (Morgan 1977:187-291).

Morgan theorizes that the 1740s were probably the critical decade in the demographic history of South Carolina blacks, during which the slave population began to grow sufficiently as a result of natural increase to offset the effect of the male-dominated importations of the 1750s (Morgan 1977:300). By the close of the colonial period, nearly one-third of all of the slave children in the colony were found on plantations with equal sex ratios, and more equal numbers of men and women in the black population was therefore linked to an increase in fertility. Large slave communities tended to have more equitable distribution between men and women slaves, and by the end of the eighteenth century, in some parishes, almost half of all slaves were found on plantations with 100 or more slaves, and only one-sixth of the adult slaves lived on plantations with markedly imbalanced sex ratios or with members of only one sex. "A large number of South Carolina inventories," Morgan concludes from this demographic analysis, "leave no room for doubt that many colonial slaves experienced family life" (Morgan 1977:313). The structure of slave families was complex, spanning three as well as two generations. In the 1770s, he estimates, some 50 percent of the slaves were involved in families, where they were present (Morgan 1977:317). The patterns he has outlined are clearly echoed in the foregoing discussion of the Cordes' slaves.

The Cordes family documents do not lend themselves to reconstructing either the age or family structure of the plantation's slave populations. The records of the Palmer family for the late eighteenth century do include lists for the distribution of blankets that offer inferences about slave family life. The Palmer family, originally spelled Pamor, lived in St. Stephen's and had resided in the parish as long as the Cordes family had; in 1754, John Pamor, also a descendant of a Huguenot migrant, signed the letter to Alexander Keith along with Samuel Cordes, inviting Keith to become the pastor for the newly created Parish of St. Stephen (Misenhelter 1977:6-7). In a ledger spanning the years from 1777 to 1811, an anonymous member of the family noted distributing blankets to the slaves six times (Palmer Family, Ledger, 1777-1809, pp. 1, 2, 3, 167). He gave out the blankets to the heads of the slave families, recognizing, in this way, both the family structure among the slaves and the person responsible for the social unit.

Table 71 summarizes data on size of family for four of the six distributions for which the information is complete. The tabulations make the following assumptions: that the head of household took out as many blankets as he or she could, and that the master allowed only one blanket per person; and that more than one family may have occupied a cabin. Family size for the period as a whole ranged from one to six. In only one instance, December 1796, did more than half of the individuals constitute a family of one person, and in all cases, a clear majority, close to three-quarters of the population, lived in families of two or less. The mean size of family, moreover, hovered around 2. This implies that this population was dominated by young adults in the process of forming families. The tendency for household size to increase over the course of this period is consistent with this observation.

Analysis of the Palmer records refines the impression created by Morgan's statistics. It underlines the fact that although the population was more equitably distributed between men and women at the end of the century than at the

TABLE 71. Mean Slave Household Size and Distribution of Slave Households by Size, 1785-1802

(a) February 1785

Size	No.	%	Cum. %
1	11	31.4	31.4
2	14	40.0	71.4
3	6	17.2	88.6
4	4	11.4	100.0
5	0	--	
6	0	--	
Total:	35	100.0	100.0

mean = 2.1

(b) December 1796

Size	No.	%	Cum. %
1	22	51.1	51.1
2	10	23.3	74.4
3	10	23.3	97.7
4	1	2.3	100.0
5	0	--	
6	0	--	
Total:	43	100.0	100.0

mean = 1.8

(c) February 1799

Size	No.	%	Cum. %
1	17	40.5	40.5
2	14	33.3	73.8
3	5	11.9	85.7
4	5	11.9	97.6
5	1	2.4	100.0
6	0	--	
Total:	42	100.0	100.0

mean = 2.0

(d) November 1802

Size	No.	%	Cum. %
1	17	39.5	39.5
2	16	37.2	76.7
3	4	9.3	86.0
4	2	4.7	90.7
5	3	7.0	97.7
6	1	2.3	100.0
Total:	43	100.0	100.0

mean = 2.1

Source: Palmer Family, Ledger, 1777-1811, pp. 1, 2, 3, 167, ISC.

beginning, the family life produced within the confines of this demographic structure was still truncated. Although a significant part of the slave population lived in households greater than one, it was mainly homogeneous with respect to age. Children were present and evidently brought up in households with their parents. Since the generation of the mid and later eighteenth century was the last to experience contact with Africans freshly imported to South Carolina, these children were in a setting conducive to transmitting culture within the household that was still close to its African sources. In Chapter III, the changes in the ratio of white to black in St. Stephen's in the first decades of the nineteenth century were discussed, concluding that by 1850, blacks came into contact with whites far more frequently than they had in the eighteenth century. Taking the longer view of the relationship of the black family to the black community and to the wider parish population, both white and black, it is clear that stable black families came to dominate social organization of the South Carolina black population in the decades during which migration from Africa lessened and ended, and contact with whites increased.

Conclusions

Since the publication of Peter Wood's Black Majority in 1972, historians of slavery in colonial South Carolina have been sensitive to the significance of blacks in the history of South Carolina. Although Wood emphasized the contribution of slaves to the provincial culture, most notably their expertise in rice cultivation, and the African survivals evident in South Carolina slavery, the perspective among most historians has inevitably focused on the history of white South Carolinians. Eugene D. Genovese's Roll, Jordan, Roll (1974) showed that southern history consists of a dialogue between white and black Southerners, but his study has limited relevance for the eighteenth century since it is admittedly a study in antebellum culture. Similarily, Herbert Gutman's The Black Family in Slavery and Freedom, 1750-1925 (1976), although it begins with reference to the colonial period and extends to the early twentieth century, applies largely to the mid-nineteenth century. The "new" social history of quantitative methods and computer-assisted research has supplied sophisticated means of handling the documents and extracting information from them. Research by George Terry, Allan Kulikoff and Philip Morgan is of this nature, and their conclusions have informed the preceding pages.

As is evident in the citations above, conclusions from scholarly research facilitated the interpretation of the documents. All of these studies have indicated African survivals in slave life. Morgan, for example, showed how African work habits were grafted into the routines demanded by the plantation, and cited numerous instances of slaves producing items for sale in Charleston (Morgan 1977:83-85, 138). Genovese's sensitive treatment of slave religion uncovered African survivals in Afro-American Protestantism (Genovese 1974:280-284). Finally, Wood linked Gullah and Guichee to the underlying demography of colonial South Carolina, suggesting that their relative position in the population and cultural isolation were critical factors in the perpetuation of Africanisms.

All of these studies are hampered by the lack of direct testimony. The preceding chapters have endeavored to supply direct testimony by looking at a form of evidence traditionally alien to the historian. The following chapter will synthesize the archaeological evidence. The historical inquiry offers the following conclusions to assist in the interpretation of that evidence. The plantations were owned by members of the same family, although different branches of it, for most of the eighteenth and early nineteenth centuries. The men that owned Curriboo were wealthier than those who owned Yaughan. The plantations were continuously occupied by whites as well as blacks from the mid-eighteenth through the turn of the century, but these planters represented an elite stratum within the white population. The plantations were settled when St. Stephen's Parish, then called English Santee, was in an early stage of development. Very quickly, the parish became the setting for the typical slave experience. The demographic evidence is complex, showing a high degree of continuity accompanied by imports from Africa in the eighteenth century. The slave population became more stable over the course of the eighteenth century in both its ratio of men to women and in its social organization.

It is important to emphasize here that the underlying population was not static, but moving toward greater stability from relative instability implied by a preponderance of a single sex and age bracket, which is implicit in the relative paucity of children characteristic of the early eighteenth century. Finally, blacks dominated the countryside, at least in numbers, and the plantations in the eighteenth century were relatively isolated from contact with Charleston in their daily routines. This situation changed in the nineteenth century. As a result of underlying social and economic changes, the balance between blacks and whites became more equitable, and the rural low country became integrated into an economic system with Charleston as its hub. Within the Parish of St. Stephen, the population stagnated and gradually became denser in the upper portion in the vicinity of Pineville.

XII. ACCULTURATION AT CURRIBOO AND YAUGHAN

Introduction

Questions of who lived where and when are often the total objectives of research in the archaeology of historic peoples. This report has so far dealt with questions of who, where, and when, and also with the question of how the inhabitants of the slave quarters lived, within the boundaries imposed by the analytical methods used and the resource itself.

Archaeology rarely deals with questions of the primarily non-material aspects of culture. Such questions tend to be closely allied to a type or class of artifact or feature even when they are asked. Are figurines an indication of cult worship or are they toys (Paddock 1970)? Do the motifs on pottery indicate that a society was matrilineal or on the verge of collapse (Hill 1970; Longacre 1970; Rattray 1966)? Do certain intrusive artifacts show dominance or subservience by the intrusive culture or simply trade (Lathrap et al 1956)? Further, because these questions are usually asked of prehistoric sites many competing hypotheses which cannot be satisfactorily proved or disproved vie for attention. The result is that while such questions are asked they usually cannot be answered, primarily because we do not have enough independent data on the non-material culture of the group studied or on comparable groups. Comparing the apparent hierarchical burial practices of the Hopewell with such apparent practices among the Maya, for example, can show similarities and differences in the types and distributions of artifacts, but cannot go beyond this to show the causes for similarities and differences since independent variables of non-material culture cannot be held constant. Does population pressure or the development of horticulture cause such hierarchical systems to develop, or is there something in the belief system quite apart from population, technology or environment which causes such apparent hierarchical systems? Hypotheses which extrapolate from the material to the non-material will remain hypotheses in prehistoric studies without independent controls over some classes of non-material variables.

Historical archaeology offers the opportunity for controlling some of these non-material variables. The non-material variables must be controlled so that attention can be focused on the archaeological data. Once models can be tested in such controlled circumstances perhaps they can be applied more successfully to prehistoric research with a better understanding of the results. Lathrap et al (1956:25) noted this problem and stated,

> Comparatively few of the known examples of culture contact have been adequately recorded and analyzed. The most important desideratum is the carefully controlled excavation of more sites whose histories are known from written records, to provide a sound basis for analogical inferences in interpreting the evidence at fully prehistoric sites.

The data obtained from the slave quarters at Curriboo and Yaughan lend themselves to a non-material aspect of culture within a reasonably controlled

situation. There are undoubtedly gaps in the data, variables which are presently unknown, and a limited application for the results. In spite of this, it is felt that the attempt should be made to examine acculturation at Yaughan and Curriboo plantations. This decision was reached after considering that no other slave quarters in the Southeast have been so completely examined; the historical research has been sufficient to isolate certain variables, thus narrowing down the non-material variables to be explained; and the data tends to indicate without further elaboration that acculturation within the plantations may be a lucrative avenue of study.

Review of the hypotheses presented at the beginning of this report will show that acculturation is implied or explicitly stated in each of them. It is clear that throughout the analysis acculturation was considered an important aspect of the study.

Hypothesis 1 stated that Colono was made by and for the slaves, and that one variable affecting the hypothesis would be that the diverse backgrounds of the slaves would be apparent in the finished pottery. This implies a blending, or the results of acculturation, of various cultural backgrounds in a single class of artifact within the new slave culture.

Hypothesis 2 stated that Colono declined in importance and nonlocal ceramics increased over time and that this may have been the result of a change in status or change over time (acculturation).

Hypothesis 3 stated that patterns of artifacts are culturally determined and will vary from the Anglo-American pattern. It was noted explicitly that the magnitude of the differences in patterns would be influenced by the degree of acculturation in the slave quarters.

Hypotheses 4 and 5 stated explicitly that acculturation would be reflected in the architecture of the plantations.

Defining the Problem

A definition of this acculturation phenomenon must be set forth and criteria which can be tested archaeologically must be established to discuss acculturation at Curriboo and Yaughan. Acculturation was defined by Redfield et al (1936:149) as "... those phenomena which result when groups of individuals having different cultures come into continuous first hand contact, with subsequent changes in the original culture patterns of either or both groups." Later anthropological literature has been devoted to the acculturation of non-material/ideational systems versus material/behavioral systems, the relative speed of acculturation of different aspects of culture, and how varying degrees of social integration of both societies determine which society changes most and how rapidly. A brief perusal of the anthropological literature indicates that very little work has been conducted on acculturation of more than one cultural group (as was the case among American slaves) or on the nature of acculturation when the enslavement of the acculturating group is involved (Keesing and Keesing 1971).

This discussion of acculturation owes much of its direction to Redfield et al's (1936) Memorandum for the Study of Acculturation. In this work the authors not only defined acculturation, but they also summarized those aspects of the process which deserved attention by anthropologists (no specific mention was made of archaeology). Following their work, acculturation became popular in the anthropological community especially until the mid 1950s. Articles were written about types of acculturation (Freed 1957), specific cases of acculturation (Bruner 1956), acculturation of ethnic groups in the United States (Spiro 1955), and occasionally on archaeological evidence of acculturation (Lathrap et al 1956, Hill 1970, Longacre 1970, White 1975, and Henry 1980). Apparently the subject was felt to be exhausted, or more likely ceased being a fad, so that since the 1950s relatively little new work has been conducted exclusively on acculturation (Honigman 1973:1104).

Despite this vast amount of work between the 1930s and 1950s many of the avenues of study indicated by Redfield et al have not been entirely explored, and certainly from the standpoint of archaeology the study of acculturation has barely begun. As noted by Lathrap et al (1956:26), archaeology is in a particularly advantageous position to study a subject which relies on time depth. Some of the avenues pointed out by Redfield et al (1936:150-152) which could be illuminated by archaeological study of eighteenth century plantation slavery might be the type of contact involved between groups of "markedly different size", of "unequal degrees of complexity in material aspects of culture", and where the acculturating group is brought "into contact with the new culture in a new region." They note situations "where elements of culture are forced upon a people" and "where inequality exists between groups" on political, economic and social levels. They point to the question of what traits will be accepted by acculturating groups and why. Finally, they note that the integration of traits requires that the integration be viewed over time.

Acculturation cannot be discussed without touching on status, especially when discussing slavery. Low status would be ascribed to a newly arrived African slave by both white and slave society if that slave could not speak the common language (presumably English), if he/she could not perform required tasks properly, and if the individual did not know the leaders in the slave community or how to cope in a new situation. Obviously there were different levels of status within the slave community between the newly arrived slave and the driver who had acquired considerable responsibility and power over the other slaves. The aquisition of such status required acculturation, whether this meant acculturating into slave quarter society or into white society. The aquisition of status also implies learning what status is, how to achieve it, and actually modifying one's behaviour to gain it. In the following discussion, therefore, status and acculturation will be discussed together.

Archaeology and History at Curriboo and Yaughan

Attempting to determine the presence of acculturation through archaeological data is fraught with difficulty. Archaeology must deal with a distorted sample of the material culture and material goods evident to the archaeologist may not imply acceptance of the non-material trappings normally associated

with them, despite Lathrap et al's (1956) implied attempt to equate the two. These problems, which would be insurmountable in prehistory (see, for example, Meggers 1975), have been partially mitigated by historical research for this project.

The historical research has established constants at the plantations which allow certain conclusions to be drawn from the archaeological data. An initial problem which would have made it impossible to draw conclusions from the archaeological data was the question of the relative demographic stability in the slave quarters. Without such stability any conclusions on culture change could have been ascribed to "outside" influences rather than internal change and acculturation within the plantations. Such stability was present at Curriboo and Yaughan, as explained in detail in Chapter XI. Any changes apparent in the archaeological data therefore have a high probability of being the result of local change rather than the result of wholesale changes in the slave population, with totally new groups of slaves replacing the previous population and bringing in new ideas from outside the region.

Based upon a study of plantation and parish records, the slaves at Yaughan were virtually isolated from white culture between the 1740s and the Revolutionary War. Thereafter their contacts with white culture undoubtedly increased, although they still outnumbered the white population and remained fairly isolated when in the slave quarter. Until at least the Revolutionary War any changes in the archaeological record would probably not have been the direct result of forced acculturation to the extent that it was later to become.

The historical research has also established that before the decade of the Revolutionary War the number of newly imported African slaves may have significantly increased slave contact with non-western cultures. After the Revolutionary War such contact decreased significantly, so that the slaves at Yaughan and Curriboo were essentially isolated from any direct contact with African cultures. Archaeologically, this would mean that more evidence of African culture should be evident prior to the 1780s and that different cultural patterns should be evident after that time, as the slave quarters evolved their own cultural patterns based upon African traditions and upon more and continuing Anglo-American contact. Although there is a suggestion that perhaps there were one or two Indian slaves at Yaughan, historical research concluded that their impact on the slave culture would have been totally obscured by the overwhelming number of African slaves. Further, the slaves apparently had the freedom to visit other plantations in the parish, share ideas with other slaves in relatively the same conditions as themselves, and to trade goods among themselves and with their masters. This would indicate that the archaeological record may also reflect slave acculturation within the parish and not only on Yaughan and Curriboo plantations.

There are several points on which the historical analysis and the archaeological analysis have independently reached similar conclusions. Such agreement further reinforces any conclusions drawn by the archaeology or history alone, and provides data upon which any conclusions must be based. 1) History has shown that the plantations were established in the 1740s and that Yaughan continued in operation until the second decade of the nineteenth century.

Curriboo continued in operation until around the turn of the eighteenth century. Mean ceramic dates agree with these date ranges. 2) The historical research indicates that Yaughan plantation had approximately 20 to 30 slaves by the 1750s and increased this to approximately 80 until the late 1790s, when the number began to decrease again to around 40 to 50. The archeology at Yaughan, where the entire early (pre-Revolutionary War) slave quarter was excavated, contained nine houses which probably housed slaves. Assuming 3 to 4 slaves per house or 50 square feet of floor space per slave (Morgan 1977:47-48) provides a total of 27 to 36 slaves before the Revolutionary War. A second and later slave quarter (38BK75) overlapped the ending occupation dates of the earlier quarter, and the earlier quarter was later abandoned, leaving only the latest quarter. This agrees with the cycle of slave ownership noted in the historic documents. 3) Historical documents indicate that Samuel Cordes of Curriboo was the more successful manager and better off financially. If the conditions of slave life are an indication of the wealth of the owner, then the different financial conditions of the owners noted in the history was also reflected in the archaeology. 4) The historical documents indicate that Thomas Cordes did not live in residence until the Revolutionary War. A surface survey of the suspected main house at 38BK75 Locus B (see Chapter IV) produced a similar result, indicating that it was inhabited well after the initial slave occupation and between the Revolutionary War and the first decades of the nineteenth century.

With these congruences between the historical and archaeological records, and the further conclusions drawn from historical analysis concerning the non-material conditions of slavery at Yaughan and Curriboo, a unique opportunity presents itself to archaeologically examine the acculturation and status of plantation slaves in South Carolina from the mid-eighteenth to the early nineteenth centuries.

Criteria for Acculturation

Archaeological criteria for acculturation are necessarily material criteria. These may hold implications for the non-material aspects of behavior, but the criteria must be on the material level. These archaeological criteria can be grouped into various classes.

It has been noted by Keesing and Keesing (1971:353-354) that certain of these classes are more easily changed than others and that some classes may indicate a more superficial degree of acculturation than others. At one end of the scale would be the acceptance of an artifact or artifact type by a group of people where the artifact fills a preexisting functional niche in the culture. Such a situation would be very superficial evidence of acculturation. On the other end of the scale would be the acceptance of a wholly new world view with complete rejection of the original world view and all or most of its material and non-material associations. For these reasons the appearance of single artifacts or minor artifact types are given less weight in the argument for acculturation.

Of more significance are changes in two or more types or whole classes of artifacts, or, in other words, changes in artifact patterns as used by South (1977a). While the appearance of single artifacts or minor artifact types

might be the result of one or two individuals, the change in the relative proportions of whole classes of artifacts as reflected in artifact patterns would be much more conclusive proof of culture change. However, artifacts may not be as conclusive evidence as settlement pattern changes.

Settlement patterns change more slowly than artifacts or artifact patterns. First, the work and planning involved in changing a house type or settlement plan is usually much greater than a change in form or function of an artifact type. Second, houses and large structures are used for longer periods of time than individual artifacts. That is, the replacement of artifact attributes and functions is easier than it is for structures since there are more opportunities to make changes. Since settlement patterns tend to be more conservative and involve more planning than artifact types, changes in house type and settlement plan are considered here to be stronger evidence of acculturation than changes in artifacts.

Artifact changes, artifact pattern changes and settlement pattern changes in an enforced slave setting are suspect because of the fact that acceptance by the slaves may have been enforced from outside. From historical research this uncertainty about the quality of the evidence may not be so important at Curriboo and Yaughan, however, because it has been established that the slaves had a certain degree of freedom in such matters. Nevertheless, proof of acculturation based on artifacts and houses cannot be as conclusive as changes in less obvious (to the slave masters, at least) aspects of culture. This is the same argument used by ceramic typologists when choosing ceramic attributes for analysis. The less visible a cultural trait, the more it reflects deep-seated attitudes and psychology and the less liable it is to conscious change. For this reason those traits not readily accessible to the slave master may hold the best evidence for acculturation in the slave quarter. One such trait is foodways. This does not mean the kinds of food eaten, since these were often supplied by the master, as much as it does how the foods were prepared and eaten, or the process of eating. Changes in foodways in a slave setting where there was no central kitchen allowed a certain leeway to slave adaptation that is not found in more readily visible and controllable traits such as clothing, tools, and housing. Changes in foodways are, therefore, considered to be among the strongest evidences of acculturation.

The archaeological criteria for acculturation, then, are the acceptance of new artifacts, new artifact patterns, new settlement patterns and new foodways during the occupation of the sites. If these things change, becoming more like the dominant white culture, between the beginning of the occupation at the sites in the 1740s their abandonment in the nineteenth century, we will be able to conclude that acculturation has taken place. The magnitude of the changes and where and when they occur are the subject of the following sections.

Acculturation Periods

From approximately 1745 to 1780 the slaves at Yaughan were gradually exposed to Anglo-American cultural influences. From a part-time overseer and perhaps even part-time habitation by the slaves themselves to a full time overseer and the permanent habitation of 38BK76, slave life at Yaughan settled into a

routine based on indigo and rice production. This life was characterized by its isolation from Anglo-American society, especially on the plantation but also within the parish generally, by the slow increase in the size of the slave population from natural increase and the influx of new slaves from Africa, and most importantly by a general stability and continuity in the slave community.

From approximately 1780 until about 1805 the size of the slave population at Yaughan doubled. During this time the new slave quarter at 38BK75 was built and at the end of this period the old slave quarter at 38BK76 declined until the major portion of the latter site was no longer used by the late 1790s. This period is characterized by a dramatic increase in the number of slaves of non-African birth, stability within the corps of the Yaughan slave population, many more contacts with Anglo-American society, including a resident owner, his growing family and a growing white population in the parish, and by a general loss of the relative isolation of previous years. Such an increase in the slave population and contacts with Anglo-American culture must have resulted in more regimentation in the organization of the work force and in more restrictions on the freedom of slaves to maintain visible signs of African speech patterns, patterns of dress, and forms of acting when in the presence of whites. Since there appears to have been an intensive effort by Thomas Cordes at Yaughan to pursue indigo and rice, requiring a doubling of his slave force, it is also likely that the slaves had less free time to pursue indigenous crafts and growing or foraging for their own food. The lack of indigenous craft and food resources, in turn, would have needed to be filled by outside sources based upon slave needs, but probably supplied by the owner. This would have greatly influenced the types of food and material items found archaeologically.

From approximately 1805 to 1825 Yaughan Plantation saw a decrease in the number of slaves and the uses to which they were put. Thomas Cordes' widow, Charlotte, appears to have moved to Pineville during this period and began renting out her slaves to other plantation owners. This period is characterized by the maintenance of a corps of slaves descendant from the original Cordes slaves, thereby maintaining a stability and continuity in the slave quarter. However, acculturation was undoubtedly affected by slaves who had been rented out and returned to the plantation with new experiences and perhaps more profound changes in their cultural outlook than would have resulted in earlier periods from short visits to friends on other plantations. From an historical point of view, therefore, one should expect the archaeology at Yaughan to express more Africanisms during the early period (before the Revolutionary War), and a decrease in Africanisms with a concurrent increase in acculturation during the last two periods. Site 38BK76 generally represents the first period with overlap into the second period, and site 38BK75 represents the second and third periods at Yaughan.

There is, unfortunately, no site which only represents one period except for 38BK245, which represents the Curriboo equivalent to the second period at Yaughan. The slave quarter at Curriboo operated from approximately 1740 to 1800, or during the time span of periods one and two at Yaughan. During this time the owner was generally in residence at least part of the year and appears to have taken more interest in and to have done a better job of running

his plantation profitably. The slave population, although larger than that at Yaughan, exhibited the stability and continuity evident at Yaughan. Curriboo produced naval stores and bricks as well as labor intensive agricultural products and toward the end of its occupation, contained what appears to be an office or administrative building which indicated the seriousness with which Samuel Cordes conducted his affairs. A situation in which the slave population is relatively large, the owner is in residence at least on a part-time basis, and the plantation was profitably run and maintained would be more similar to the second period at Yaughan than to either the first or third periods.

Artifactual Evidence

Certain categories of artifacts, artifact patterns, architecture and foodways at the plantations were analyzed to determine if such shifts in acculturation were operating in the archaeology. Archaeological evidence that the slaves had accepted certain Anglo-American cultural items prior to the Revolutionary War is shown by artifacts such as an iron which may have been used to iron slave or the overseer's clothing, a thimble for sewing clothing or decorating Colono pottery, a twisted lead pencil, indicating that the slaves were exposed to the concept of reading and writing even though they may not have been legally allowed to learn these skills, and a mirror probably for personal use by a slave. These artifacts do not show conclusively that the slaves had accepted the non-material cultural patterns associated with such items by Anglo-American society, but at least they were exposed to such items. It should also be noted that the artifacts at 38BK76 represented a small fraction of the 22,666 total artifacts recovered from the site. At 38BK245 there were virtually no such individual items clearly attributable to the slave occupation. At 38BK75, hypothesized to be the most acculturated site, there was a coin indicating that at least some slaves were aware of a money economy and probably took part in it, a finger ring, and umbrella struts. While these Anglo-American artifacts again show acceptance of material goods, their proportion of the 6689 artifacts at 38BK75 is very small and inconclusive.

Perhaps more convincing evidence for and the comparative degree of acculturation is found in minor artifact groups which appear at two or more sites. Normally, conclusions drawn from low percentages of artifact groups can be explained by sampling error, i.e., small sample size or the method by which the sample was selected or retrieved. Although sampling error cannot be completely ruled out, it should be remembered that entire structures and their associated features were excavated at each site resulting in nearly total artifact retrieval. Also, large areas of all three sites were intensively collected, and all large features, even those not clearly associated with structures, were excavated. Indeed, virtually the entire slave quarter at 38BK76 was exposed. The sample size at all three sites is substantial, negating, to a certain extent, any non-randomness inherent in the field methods. While the following conclusions may be tentative, they are certainly suggestive and more solidly based than those drawn from sampling parts of a few structures or areas within a site.

The largest single minor artifact type was glassware. A comparison of the glass sherds in Table 72 shows that as a percentage of total artifacts, stemmed glasses, tumblers, and pressed glass represented .19 percent at 38BK75, whereas at 38BK76 and 38BK245 they represented .07 percent or two and one half times less than at 38BK75. Since the percentages at 38BK76 and 38BK245 were the same and 38BK76 had more, this may indicate that glassware is more representative of the third period at Yaughan (1805-1825). Definitive archaeological dating at such a level was not possible, however.

Table 72. Artifact Types Compared as Percentages of Total Artifacts

	38BK75	38BK76	38BK245
Nonessential Glassware	0.19	0.07	0.07
Tableware	0.10	0.03	0.12
Non-ceramic Kitchen Group	8.6	8.8	11.7
Colono Ceramics	38.1	66.4	55.8
Nonlocal Ceramics	15.3	7.2	7.5
Catawba Ceramics	4.4	0.62	0.29
All Ceramics	57.7	74.2	63.6
Architecture Group	23.5	11.6	16.2
Furniture Group	0.07	0.05	0.02
Arms Group	0.16	0.02	0.29
Glass Beads	0.01	0.09	0.05
Tobacco Group	2.7	3.3	5.2
Fishing Gear	0.0	0.02	0.0

Gun parts noted on Table 72 made up .16 percent of the 38BK75 artifacts, .29 percent of the artifacts at 38BK245, and only .02 percent of the artifacts at 38BK76. If the ownership or use of guns for hunting or chasing pests is an indication of acculturation on the part of the slave entrusted with a gun, the slaves at 38BK75 and 38BK245 appear to have had the most trust and been the most acculturated. The difference between 38BK75 and 38BK245, which runs counter to the expectation that time strictly correlates with acculturation, may actually be a reflection of the fact that during the third phase at 38BK75, the number of slaves rented out, and, therefore, not using guns, was enough to lower the percentage of gun parts.

If it is true that slaves generally had less time and freedom during the second and third periods to forage for their own food, the time taken up by hunting (one of the possible uses of firearms) would have decreased the already restricted time allowed for other such activities as fishing and plant gathering. Archaeologically, one should see a decrease in the evidence for such activities. At Site 38BK76, the total number of fish hooks, possible fish hooks, and frog gigs was five and there was no fishing gear at either 38BK75 or 38BK245. This pattern may be the result of sampling at 38BK75

and 38BK245, but does suggest that fishing was more important at 38BK76. Such a low amount of fishing gear is, like the other artifact types so far mentioned, inconclusive evidence of acculturation, but the differences are suggestive.

A fourth minor artifact type was glass beads. The ownership and use of such beads has tended to be understood as part of the slave artifact assemblage, and not part of the Anglo-American cultural pattern. For this reason one should expect the earliest period to have the most beads and the latest to have the least. The beads at 38BK76 made up .09 percent of the total artifacts. The percentages at 38BK75 and 38BK245 were .01 percent and .05 percent, respectively. On an acculturation scale from no beads to all beads, Site 38BK75 is clearly the most acculturated, 38BK245 the next most acculturated, and 38BK76 the least acculturated.

Tableware was a fifth minor artifact type which may show acculturation. Tableware (knives and forks) is .10 percent at 38BK75, and .03 percent and .12 percent at 38BK76 and 38BK245, respectively. Here again, sites 38BK75 and 38BK245 appear to be the most acculturated. This data by itself may mean very little, however as will be discussed at the end of this chapter, other aspects of foodways also support acculturation.

A final minor artifact category was furniture artifacts. There is ample historical evidence that slaves met many of their own needs in this regard (Otto 1975:375-380). An increase in the use of manufactured furniture artifacts would tend to indicate that the slaves not only accepted such items, but that they either could not or would not make all such items themselves. Site 38BK75 did, indeed, have the most furniture hardware, .07 percent of the total artifacts. Site 38BK76 had .05 percent and 38BK245 had .02 percent. These percentages are very close, but again 38BK75 and 38BK245 had relatively more such items than 38BK76. This may be because most of the furniture material from 38BK76 was found at Structure 76B, the latest structure at the site, and also because Structure 76B has two structures, one of which was a posthole structure characteristic of later house types. In any case, the results of such small percentages are inconclusive, although furniture artifacts may become a better indicator of acculturation on nineteenth century sites when more such material would be available for purchase.

With this brief discussion, there is a suggestion that individual artifacts and minor artifact types reflect acculturation in the slave quarter. It has also been pointed out that such evidence is inconclusive since acceptance of a single artifact type or minor group does not necessarily indicate acceptance of new habits or outlooks.

The following artifact type has already been discussed in some detail. It was the most numerous artifact at any site and shows more than simple acceptance of a single new item. Colono ceramics required planning, creativity, observation, and extensive knowledge of technique and local resources to be manufactured. Some of the data collected on Colono will be discussed below with foodways. It is unfortunate that details of form could not be studied because it might have been anticipated from a detailed study of form that an

accumulation of small changes would indicate a shift to discernible Euro-American stylistic attributes. General form categories that could be discerned, however, were discussed in Chapter VIII. Certain conclusions have been drawn from the analysis of the Colono at Curriboo and Yaughan, and observation of other colonoware collections which support the hypothesis for acculturation in the slave quarters.

It was shown that the manufacture of Colono probably followed the West African tradition of open air firing, that Colono was generally not made with the coil technique as Indian pottery, that local clays were used, and that the finished product was probably not a readily saleable item to non-slaves. A chain of data was presented which tends to link Colono with colonowares in other regions of the east coast, and to the Caribbean Islands and possibly to Africa. Colono and colonoware may be the most African "Africanism" to appear on slave sites and as such the single most useful artifact for studying slave acculturation. Handler and Lange (1978:144) note that as Barbadian slaves became more acculturated the African attributes in their pottery disappeared. This change occurred more rapidly on Barbados, where whites outnumbered slaves, than on Jamaica or apparently on the mainland.

The site hypothesized to be the least acculturated (38BK76) had the highest percentage of Colono, 66.4% of the total artifacts. Site 38BK245 which should show more acculturation, had fewer Colono sherds, 55.8%. Finally, Site 38BK75, which is hypothesized to be the most acculturated, had 38.0% Colono. As noted in Chapter VIII this seriation does not agree with a strict seriation by time since 38BK245 is known from historic documents to be earlier than 38BK76. Therefore, a slow natural decrease of Colono based strictly on time is incorrect and the changes in the relative amounts of Colono must be explained by a different process.

Status was mentioned as a possible cause for differing amounts of Colono in Chapter VIII. This meant that the slaves at Curriboo were materially better off because their owner was more successful financially; this trickled down to his slaves and was evident in the amount of Colono they felt forced to produce to fulfill their needs for cooking and serving. Since the slaves apparently had the choice to produce or not produce Colono, they produced less and replaced it, not with nonlocal ceramics as might be expected, but with other goods. This is shown by the fact that at 38BK76, 74.2% of the artifacts were ceramics, whereas at 38BK245 this dropped to 63.6%, or a difference of 10.6%. At the same time the ratio of nonlocal ceramics to Colono remained nearly the same, .11:1 at 38BK76 and .13:1 at 38BK245. If the slaves at Curriboo were replacing the Colono with nonlocal ceramics, the total percentage of ceramics should have stayed the same at both sites, while nonlocal ceramics, relative to Colono, should have increased as it did at 38BK75 where the nonlocal to Colono ratio was .40:1.

What replaced the 10.6 percent decrease in Colono at 38BK245? If not nonlocal ceramics, is there another category of artifact that fills the void? The preceding discussion may give part of the answer. The following figures were derived by subtracting the percentages of 38BK76 artifacts from the percentages of 38BK245 artifacts. Approximately an extra .27 percent of the Curriboo slave artifact assemblage was directed toward gunparts. In this case

.02% (gunparts at 38BK76) was subtracted from .29% (gunparts at 38BK245), giving a .27% remainder. About 1.9% more of the Curriboo artifacts were directed toward tobacco pipes (5.2% at 38BK245 minus 3.3% at 38BK76). An extra 4.6% was directed toward Architecture Group artifacts (16.2 at 38BK245 minus 11.7% at 38BK76) and an extra 2.9% may have come from other nonceramic artifacts in the Kitchen Group (11.7% at 38BK245 minus 8.8% at 38BK76). If these percentages are added together -- .27% for gunparts, 1.9% for tobacco pipes, 4.6% for architecture, and 2.9% for non-ceramic kitchen artifacts -- the total is 9.67%, or nearly the amount of artifacts needed to replace the low percentage of Colono ceramics.

Were these expenditures on the slave artifact assemblage necessary to maintain life and health at Curriboo or were they comparative nonessentials, and do the apparent choices on the part of the owner or slaves represent acculturation? The answer to the first question must be that the items were more or less evenly divided between essentials and nonessentials. However, the use of tobacco pipes, certainly a nonessential by Anglo-American standards, may show acculturation. As noted previously, guns imply trust, and acculturation is needed for that trust. More architecture items and glassware, tableware and other non-ceramic kitchen artifacts also seem to indicate acculturation, even if the owner made all of the decisions and the slaves had absolutely no choice, which is highly improbable.

The case for the relative amounts of Colono representing acculturation is perhaps clearer when 38BK75 is considered. At that site Colono made up only 38.1% of the total artifacts, and all ceramics at the site were only 57.7% of the total assemblage. The ratio of nonlocal to Colono is .40:1. So, not only were ceramics decreasing relative to other artifacts at 38BK75, but Colono was also decreasing significantly relative to nonlocal ceramics. Clearly, other artifact types and even nonlocal ceramics were replacing Colono at 38BK75 in much greater proportions than at Curriboo. The difference in Colono at 38BK75 and 38BK76 is 28.3%, whereas between 38BK245 and 38BK76 it was only 10.6%. This greater difference between the sites was made up for primarily by an 11.9% increase in Architecture Group artifacts and a 8.1% increase in nonlocal ceramics and a 3.8% increase in Catawba ceramics. Tobacco pipes actually decreased at 38BK75, and the non-ceramic kitchen artifacts remained the same. Variation in the remaining artifact groups is too complex to unravel and the percentages involved are less than 1%.

The overall artifact patterns at the sites following South (1977a) were presented in Chapter IX. The patterns of each site were compared to a revised Carolina Artifact Pattern (CAP). The justification for the revisions is presented in Chapter IX, with the Carolina Slave Artifact Pattern based upon Yaughan, Curriboo and Spiers Landing. The overall high percentages of Kitchen, Architecture, and Tobacco Group artifacts differentiate the CSAP from the revised CAP. These overall patterns show a trend from 38BK76 to 38BK245 to Spiers Landing to 38BK75. This trend involves a decrease in the amount of Kitchen Group artifacts and an increase in Architecture Group artifacts. This trend, if continued, would eventually resemble the revised CAP. We concluded that the trend showed acculturation of slaves to a hypothetical point where the slave pattern would be indistinguishable from a poor Euro-American pattern.

Further, it was noted that the patterns of MCDs at 38BK75 and 38BK76 did not follow the normal time lag pattern usually associated with historic sites on the economic and geographic margins of society (Adams and Gaw 1977). Site 38BK75 showed time lag of approximately 15 years. Such a great amount of time lag is easily explained if the datable ceramics represent items discarded by the owner after a normal use-life and then reused by the slaves for an additional use-life. Site 38BK76, however, did not show time lag and in fact showed the reverse. At first glance this seems to indicate that slaves were acquiring nonlocal ceramics before they were manufactured or as new items and not as owner discards. The first possibility is obviously false, and the second would indicate easier access to Anglo-American material goods and therefore faster acculturation at 38BK76 than at 38BK75. This is contrary to all expectations on slave acculturation. As discussed in Chapter IX the reverse time lag evident at 38BK76 can be explained by examining the relative amounts of Colono and nonlocal types upon which the MCD is based. Since it was hypothesized and has so far been supported by the historic data that the slaves at 38BK76 were relatively isolated until the Revolutionary War and then exposed to greater Anglo-American contacts thereafter, it seems reasonable to conclude that the majority of nonlocal ceramics date from the post-Revolutionary War period (1780-1805) and therefore would give an MCD more closely aligned with this second period. If 38BK76 was inhabited from 1780 to 1795 as has been stated above, an MCD of 1773.0 would agree closely with a mean occupation date of 1787.5, assuming there were 14.5 years of time lag. Time lag at 38BK75 was 15 years or essentially the same. Interpreted in this way, the apparently false reverse time lag actually supports the contention that the early period at 38BK76 represents a time when the slaves were much less acculturated and more isolated than they were later to become.

To summarize the data on artifact types and patterns presented so far, it was assumed that Colono ceramics represented the least acculturated artifact type and as such its presence most clearly reflected the state of acculturation of the users. The amount of Colono was very high at the site expected to be the least acculturated from historical research. The amount of Colono decreased until it reached the lowest percentage at the site expected to be the most acculturated. Comparing the more acculturated sites with a base site, in this case 38BK76, it was noted that at 38BK245 Colono was replaced by essentials (e.g., Architecture, Gun and some of the Kitchen Group artifacts) and by nonessentials (e.g., tobacco pipes and the other Kitchen Group artifacts). At 38BK75 the Colono was replaced almost entirely by essentials (e.g., architecture artifacts, Catawba ceramics, nonlocal ceramics, etc.). Only a few nonessentials, such as stemmed glasses and tumblers in the Kitchen Group, may have replaced Colono. Furthermore, at 38BK75 some nonessentials noted at 38BK76 decreased (e.g., tobacco pipes). The total artifact patterns and MCDs at Yaughan further supported our conclusions that the slaves were undergoing acculturation during the occupation of Yaughan and Curriboo. The artifact patterns, especially Kitchen and Architecture Groups, may offer a scale of acculturation for other sites as well.

Some further conclusions can be drawn based on the artifacts. It seems apparent that acculturation was more complete at 38BK75 than at 38BK245; however, the character of the acculturation seems also to have been different at the two sites. While replacement types at 38BK245 included fairly even

amounts of essentials and nonessentials, at 38BK75 the emphasis was on essentials. The differences in nonessentials and essentials may reflect overall economic conditions at the plantations. There is also an aspect of the acculturation process lightly touched upon before, that the response to acculturation may involve actual choices on the part of the slaves, and that the changes seen in the archaeology are not solely decisions by the owner.

The variation at all three sites in nonessential items, where two of the sites were on the same plantation with the same owner and where one owner controlled all three sites at one point, indicates that the slaves were probably making at least some of the choices or communicating their perceived needs and wants to the owner who then acted upon them. This is important because evidence of voluntary acculturation presents a much more satisfactory and stronger case for non-material acculturation than the enforced acceptance of objects.

Architectural Evidence

Architectural evidence for change within the slave quarters at Yaughan and Curriboo may support the acculturation hypothesis. The basic data for this brief summary of architectural evidence is given in Chapter VII. The construction techniques at Curriboo and Yaughan included several types: trench foundations with fairly closely set posts, leading to a conclusion that the superstructure was mudwall with a lightweight thatched roof; trench foundations with more widely spaced and occasionally prepared posts, leading to a conclusion that the superstructure was frame; posthole foundations with widely set posts, also leading to a conclusion that the superstructure was frame; and a brick foundation of widely set piers with a brick chimney, leading to a conclusion of a frame superstructure. There is occasionally evidence for interior walls or partitions in the larger structures and for tables, benches, beds or other interior furniture in the smaller structures.

At Yaughan there is a sequence of structures from poorly or unevenly constructed trench structures to better constructed posthole structures. At Curriboo there is a sequence from well built trench structures to the brick piered structure. Within each plantation evolution of architectural techniques is evident. Between plantations there is evidence that the poorly built mudwalled trench structures at 38BK76 are coeval with the well built, usually frame, trench structures at 38BK245. The orientation, alignment and care with which the Curriboo structures were built as opposed to the early structures at Yaughan leads to a conclusion that there was probably more control over the slaves at Curriboo than at early Yaughan. This reinforces the historic documents and the previous statement that Curriboo is more similar to the second period at Yaughan than to the first or third periods. Unfortunately, neither of the owners' houses could be examined to determine whether the sequence noted in the slave quarters approached an upper class Anglo-American pattern of the same era. However, there is one structural complex at 38BK76 which appears to be outside the slave construction sequence. Its artifacts, associated features and complexity have resulted in its tentative identification as the overseer's house or complex. If this was the overseer's house it represents an example of Anglo-American structures of

the period and does indeed point the direction for future structures at Yaughan. Its post distance and hypothesized superstructure resemble the later structures at 38BK75 more than the contemporary or sometimes later structures at 38BK76. The construction sequence and the possible overseer's complex indicate that change occurred in slave architecture through time and probably approached a more Anglo-American pattern.

Further support that the slaves were approaching a more Anglo-American pattern are the width to length ratios at the sites and in the comparative literature. The earlier domestic structures where slaves have already been shown to have had more freedom of action and to have been less acculturated are more rectangular. In fact a seriation based on W/L ratios places the sites from 38BK76 Group B and 38BK245 to 38BK76 Group B to 38BK75, with 38BK75 being the most square and the closest to the Euro-American structures in the literature.

We conclude that the architecture supports a sequence of acculturation similar to that observed in the artifacts and artifact patterns and hypothesized from the historical research. Such subtle changes as W/L ratios over an extended period was most likely not the result of direct imposition by an outside force. A change imposed from outside would have been more drastic and clearcut. One day houses would have been built in one fashion, and the next they would have been clearly different. A subtle change implies an unconscious acceptance of new views on what a house should look like and how it should be built. The variation noted in the earlier slave quarter at Yaughan seems to indicate that there was a general consensus that houses should be rectangular, but exactly in what proportions was not generally agreed upon or considered important. At Curriboo the rectangularity becomes more standardized and apparently more important. At 38BK75 the move to squareness has clearly begun with the standardization of size as well.

Food Preparation

The last subject for consideration of acculturation presented here is that of foodways. This subject has been presented in some detail in Chapter X with respect to food sources available to and used by the slaves. The processes of food consumption have been briefly touched upon throughout the report. The following paragraphs will bring our conclusions from individual sources together and develop overall conclusions on how foodways show acculturation. It has been stated that the process of food procurement and preparation should show the subtle non-material aspects of acculturation more clearly than examination of the artifacts as objects. This is so because processes usually are not as obvious to outsiders and therefore not as liable to control by outsiders. It is possible that slaves, or any acculturating group, would outwardly accept certain objects or even houses and occupations if they are forced to, without accepting the changes in mental outlook that these seem to imply. A good example of this is quoted by Bruner (1956:612) as spoken by an unacculturated Mandan-Hidatsa, "We Indians are just like those lizards that change their colors. When we are with whites we act one way and when we are with Indians we act another." Foodways is one activity that was conducted when slaves were with slaves.

It has been established that the slaves at Yaughan probably had a primarily vegetarian diet of grains. It has been suggested that this diet was supplemented by other plant foods which would not have been preserved. Meat sources are nearly absent, although fishing gear suggests that fish may have been part of the diet and not have been preserved. Large mammals, though, are virtually nonexistent either in the earlier or later periods. At Curriboo the diet appears to have been more mixed, with much more faunal material despite poorer preservation conditions than Yaughan. Most of the foods at both plantations whether plant or animal, were domestics. Since few slaves were obtained from parts of Africa which were nonagricultural, this diet would not have been wholly unusual for new arrivals. In any case, they may not have had much choice in what they ate.

On the subject of food processing certain conclusions can be stated on the basis of the archaeology:

-Slaves cooked on-site. There is ample evidence for cooking on-site presented by fire blackened Colono pots, some with burned organic residue.

-Slaves cooked out-of-doors. There is evidence for one certain and one possible hearth at Yaughan and only one possible interior hearth. There is no evidence for chimneys or wattle and daub or brick, and no evidence that any of the structures burned from open fires as would be expected with interior hearths.

-Slaves did not cook or eat in a central kitchen nor was cooked food regularly brought into the quarters. No kitchen structure was found at any site, and particularly at completely excavated Site 38BK76. The dispersion of Colono cooking pots indicates that cooking and eating were conducted across the sites.

-Slaves cooked and probably ate as individuals or in small groups. This is indicated by the small size of cooking pots, which would not have contained more than a quart at a time, and the single-serving size of the bowls. This is also supported by our conclusion that there was no central kitchen.

-Slaves ate mostly stews, soups and gruel. Only one sherd of a shallow Colono bowl or "plate" was found at the sites, in contrast to the many Colono plates found in Charleston (Lise personal communication 1980). The remaining Colono vessels were bowls, cooking pots and a few examples of strainers and a lid handle possibly representing teapots.

-Slaves ate less soup and stew at 38BK75. This is indicated by a shift in ceramic forms and types from site 38BK76 to 38BK75, and by a slight increase in tableware at 38BK75 and 38BK245.

-Slaves usually ate with their fingers or with wooden spoons. There is very little evidence for metal forks, knives or spoons at the sites. Negative evidence indicates that the slaves must have used wood or other perishable materials to fashion eating utensils. Such materials do not make good forks or knives.

What can these conclusions say about acculturation in the slave quarters? First, there appears to have been less change in foodways during the slave occupation than is shown by house types or many artifact types. The same foods, the same kind of cooking location, and probably the same hearth size or eating group size obtains from the earliest to latest periods. This is to be expected if foodways are less subject to change from outside. On the other hand, there is one change that may outweigh this seeming cultural inertia, and that is evidence for a decrease in the liquid or semi-liquid cuisine at 38BK245 and especially at 38BK75. Chapter VIII discusses the changes in ceramic forms in some detail.

Several statistically significant shifts in ceramic forms and types resulted in conclusions that Colono ceramics decreased and nonlocal ceramics increased over time. Within this trend significant changes in form also took place. Overall, cooking pots decreased during the later periods and flatware increased dramatically. The number of Colono cups and bowls increased relative to Colono cooking pots. Part of the decrease in cooking pots undoubtedly was made up for by iron kettles. The general trend indicates that the ceramics changed from those typical of liquid or semi-liquid foods to those more typical of foods prepared to be eaten from flatwares.

The shift from no permanent hearths at 38BK76 to a more permanent hearth with posts at 38BK75 has implications for cooking along with the shift from Colono pots to iron kettles. Posts would have allowed iron kettles (but not handleless Colono pots) to be hung from a cross support. If the hypothesis concerning the use of a pot resting on a few stones is generally valid for 38BK76, then a permanent hearth with posts and iron kettles with legs and handles represents a change in how hearths were used. Unfortunately, this suggested change is only supported by two possible hearths without posts at 38BK76, a lack of chimneys at all sites, and one permanent hearth with posts at 38BK75. It is also possible that some of the unidentifiable postholes at 38BK76 may have represented the use of posts for temporary hearths at that site, although the two best candidates for hearths did not have posts. In any case, the impermanence of hearths at 38BK76 and the permanence of the hearth at 38BK75 are supported by the data even if the differential use of posts is not.

A significant change from one set of forms to another and a less substantiated change from temporary hearths to more permanent hearths, when these changes imply new cooking and serving methods, is the kind of subtle change that reflects change in the non-material culture. The proper way of cooking and eating is one of the most traditional aspects of culture learned from childhood. Change in such a tradition is the best proof of acculturation.

XIII. CONCLUSIONS AND FUTURE RESEARCH QUESTIONS

The historical research showed that Yaughan (38BK75 and 38BK76) and Curriboo (38BK245) plantations were owned by members of the Cordes family from 1737 to the mid-1830s. Although begun as secondary ventures ancillary to the family's holdings in the Parish of St. John, Berkeley, both plantations became residences as well as economic units in the mid to late eighteenth century. With their sale away from members of the family, they were either consolidated into larger holdings or subdivided. Studying the period from the 1740s to the 1820s, moreover, covered an entire cycle, from settlement through a frontier stage to residence and full occupation to sale and disintegration.

Five hypotheses were set forth at the beginning of analysis to guide the research. These have been addressed throughout the report and are summarized below.

> Hypothesis 1. The Colono ceramics recovered from sites 38BK75, 38BK76 and 38BK245 represent ceramics that were made by slaves who occupied the plantations, and that the slaves produced those wares for their own use. It is further hypothesized that the Yaughan and Curriboo Plantation samples are representative of the colonowares that were being made and used by African slaves in coastal South Carolina during that period.

In Chapter VIII it was shown that two types of colonoware ceramics were present at Curriboo and Yaughan plantations. These were Colono and Catawba. It was concluded that Colono was made by and for slaves. Briefly, this conclusion was based on the large quantities of Colono in the slave quarters and its low percentage at the one extant owner's house; on the presence of various skill levels within the type (i.e. the Smoothed and Tooled Varieties); on the presence of unmarketable pots and objects; on the presence of unfired sherds at Curriboo; on the variety of objects recovered including pipes, strainers and marbles; and on Colono's resemblance to known slave made ceramics on the Caribbean islands. Further, the majority of Colono was not coil-made as native American ceramics were supposed to have been; the clays used to make Colono resembled locally available clay; and there are features at the sites which can only be satisfactorily explained as clay extraction pits.

The only evidence which might have disproved the hypothesis was that no kilns were found. This, however, can be explained if the slaves fired Colono on the ground surface as is documented in West Africa. The presence of fine charcoal fragments throughout the stratigraphy of the site would support such an explanation.

Comparisons with Colono and Catawba ceramics in the area and especially with the Charleston Museum collection clearly indicated that native Americans made Catawba, and that the method of manufacture and some of the forms of Colono resembled the Curriboo and Yaughan material.

> Hypothesis 2. Colonoware declined in importance at the plantations as time passed. Conversely, there was a trend toward greater dependence on non-locally produced ceramics from the eighteenth to nineteenth centuries.

Data presented in Chapter VIII showed a clear increase in the nonlocal ceramics and a decrease in Colono from 1740 to 1825. The relative amounts did not reach the Anglo-American percentages at the end of this period, but there was a clear trend in that direction. Reasons for this trend were hypothesized to have been an increase in the slave population, a resident owner at Yaughan, and intensification of agricultural activity which caused greater regimentation to be imposed on the slaves and allowed them less free time to pursue individual craft activities. Perhaps the most important reason for this trend was acculturation of the slaves themselves as illustrated by a shift in ceramic forms from jars and pots to more kettles, bowls and flatware.

> Hypothesis 3. Patterns of artifact disposal on archaeological sites are culturally determined and can be discerned through careful analysis. Since African slaves were the products of radically different backgrounds than Anglo-Americans, the pattern of artifact disposal on African slave domestic sites should be discernible from that present on Anglo-American sites. The difference will be expressed in varying frequencies of the artifact categories that the sites share in common, as well as the absence of certain categories.

The patterns of artifact disposal were of two kinds, the relative amounts of artifact types and the location of trash disposal areas. Chapter IX has successfully shown that the relative amounts of artifact types differed significantly between the slave sites studied here and the Anglo-American sites investigated by South (1977a). This was especially true for the frequencies of Kitchen and Architecture group artifacts. Slave sites were clearly more heavily weighted towards Kitchen Groups artifacts and less towards Architecture Group artifacts.

The location of disposal areas also appeared to differ from South's (1977a) "odorimetric" scale which states that organic refuse will be deposited away from residential structures. Trash features at all sites showed that this was not the case in the slave quarters.

> Hypothesis 4. The earliest construction technique in use within the Yaughan Plantation slave quarters involved wall trench construction coupled with the use of a few individual postholes. As time passed, that mode was superceded by the use of entirely individually set posts. This construction sequence represents a transition from construction techniques used in the Caribbean and/or Africa and reflects the greater acculturation of slaves into the Anglo-American sub-culture as time passed.

The archaeological and historical evidence both pointed to the fact that trench construction was superceded by posthole construction. Further, and perhaps more importantly, there appeared to be a shift from mudwall construction to frame construction which correlated closely with the shift in foundation type. The form of the structures also shifted from rectangular to more square or to a more Anglo-American pattern. Although detailed data could not be developed on African and Caribbean structures, the literature did seem to support the hypothesis.

> Hypothesis 5. The earliest construction technique within Curriboo Plantation involved wall trench construction coupled with the use of a few individual postholes. As time passed, that mode was superceded by the use of brick pier construction for major plantation outbuildings. This construction sequence represents a transition from a frontier pattern to a more permanent settlement pattern and a successful adaption to prevailing economic trends.

It was shown at Curriboo Plantation that the early structures in the slave quarters and at the location of the hypothesized office structure were of trench construction. The brick piered office was also superimposed on the remains of a trench foundation, naval stores processing structure. Unfortunately, no other restricted-use structures were found for the later periods and this hypothesis could not be adequately tested.

The slave occupation at Yaughan falls into three periods, from the 1740s to about 1780 characterized by isolation from Anglo-American society, from 1780 to about 1805 characterized by a dramatic increase in population and increased contact with the dominant Anglo-American culture, and from 1805 to the 1820s characterized by ever increasing contact with the outside world and a decline in the economic condition and population of the plantation. Occupied from the 1740s to the turn of the eighteenth century, Curriboo was characterized by conditions similar to those at Yaughan from 1780 to 1805.

Although the demographic and cultural parameters described from historical research do not demonstrate the existence of an autonomous black culture in eighteenth century plantation life, they argue powerfully that the social environment was ripe for such a culture to flourish. Direct testimony from eighteenth century slaves is lacking in the historical record, and all too frequently, historians have read the evidence from nineteenth century slaves back into the Colonial Period. The historical documentation has shown very clearly that the eighteenth century plantation was different from the nineteenth century plantation. Life in the slave quarter was one of these differences, and the archaeology that has ensued from this project represents direct statements from long dead Africans and demonstrates again the difference between the colonial and antebellum plantation systems.

Archaeological investigations at Yaughan and Curriboo indicated that much of value to the study of slave life could be gathered from archaeological data. With the conclusions on slave life at the plantations established by the historical documents, certain facets of slave life could be studied as internal

culture change and acculturation within a limited area. Archaeology supported the essential outline of the three periods of acculturation and offered data and conclusions not available from the historical sources alone. Among the cultural patterns established from the material remains of the slave quarters were the attribution of Colono ceramics to black slaves and Catawba ceramics to Indian trade wares. Artifact types indicated increasing acceptance of new types by the slaves at Yaughan and Curriboo. Overall artifact patterns and mean ceramic dates also supported major shifts in the acceptance of whole different functional categories of artifacts. Architecture shed light on how the slaves lived and illustrated acculturation on a deeper and more pervasive level of culture. Studies of slave foodways showed a change from being less Anglo-American to more Anglo-American in food preparation and consumption patterns.

In conclusion, it has been possible to illustrate acculturation in the archaeological record through the study of artifacts, minor artifact types, artifact patterns, architecture and foodways. Many questions have been raised concerning lifeways in the slave quarter and the acculturation of an important segment of the American population. Much more work needs to be done in the archaeological study of slavery. Possible areas of concern are:

-What differences in the character of plantations from the eighteenth and nineteenth centuries caused the shifts noted in the archaeology of these two periods? Facile overgeneralizations that rice plantations used the task system of labor and cotton plantations used the gang system do not get to the heart of the matter. Thorough, site specific history is necessary to control not only the when and who of history, but also the deeper meanings contained in historical documents.

-How can changes documented in the historic records be identified archaeologically? This is a problem for all of historical archaeology and involves examination of what kinds of things are preserved archaeologically that may reflect historical records and how these things should be analyzed to study or examine the non-material aspects of culture.

-Does the Carolina Slave Artifact Pattern hold up throughout South Carolina during the eighteenth century? Such a pattern might be more properly named the Berkeley County Slave Artifact Pattern if other slave sites in South Carolina are examined more closely. How does the pattern compare with slave sites in other regions and how does it change in the nineteenth century? Without such a pattern for comparison, differences in the archaeological record cannot be distinguished.

-Are there any patterns which remain the same throughout Afro-American history and that are identifiable in the archaeological record? Studies in freed slave and twentieth century black neighborhoods are presently being conducted. The trend of artifact patterns as presently set up tends to indicate that such patterns on more recent sites would be indistinguishable from Anglo-American patterns, however, there may be patterns not yet developed which would show ethnic differences in the nineteenth and twentieth centuries.

-Is there a difference between acculturation in rural and urban slave settings that can be identified archaeologically? Colonoware forms have already been suggested as a possible avenue for such research.

-What was the cultural heritage brought from Africa? This project necessarily starts with slaves already acculturated to some extent, and the full range of acculturation could not be examined because of the almost total lack of comparative archaeological data on African groups from 1500 to 1850.

-Can social groups be characterized as dependent or having self-esteem, and if so, can this be determined archaeologically? Studying groups of people from slavery to freedom could provide such insights and provide time depth to psychological anthropology.

We feel it is appropriate that a project such as this ends with perhaps more, and more interesting, questions to be answered than it began with. While some questions have been answered and many more have been left unanswered it is hoped that the data presented here will be used by other researchers to examine more complex anthropological themes.

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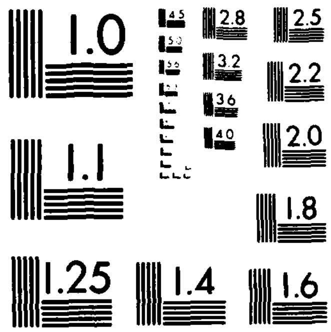
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APPENDIX A

PREHISTORIC OVERVIEW

This appendix addresses the prehistory of the project area. Anderson (1977) discussed the status of research into coastal South Carolina prehistory as of 1976, noting that there had been "a complete absence of systematic archaeological investigation in the state until the mid-1960's" (Anderson 1977:19). Since the mid-'60s, he continued, research interest had quickened in this area, but as of the present, no regional synthesis exists. The following overview, therefore, relies upon the compilation by Garrow and Williams (1980) of information from intensive survey reports in coastal South Carolina as well as on the Cooper River Rediversion survey of the project area (Brockington 1980). The latter observes that while several studies address the South Carolina coastal plan, "detailed understanding of the ecological adaptations of human groups in the interior coastal plain awaits further investigation" (Brockington 1980:17).

Paleo-Indian

The Paleo-Indian Period, 12,000-8,000 B.C., is the earliest well-documented period of human occupation in this area, although an earlier occupation of North America has been hypothesized. Current research describes these people as nomadic groups of 25-30 members who followed the movement of game, particularly the now extinct megafauna. It is also believed that these groups also exploited wild plants, timing their movements to coincide with the availability of these plants (Brockington 1980:17).

In the Great Plains and Southwest, sites of this period generally contain highly specialized projectile point types often associated with butchered remains of now extinct Pleistocene megafauna. Diagnostic Paleo-Indian artifacts, such as lanceolate (sometimes fluted) projectile points, small unifacial end scrapers, knives, drills, and graving tools have been found throughout the eastern United States (Griffin 1967), but no associations with extinct fauna have been recorded there (Garrow and Williams 1980:46). Fluted point data from South Carolina suggest that Paleo-Indian points occur most frequently on the terraces of major coastal plain drainages (Michie 1967). A distributional study of fluted points suggests that Paleo-Indian points tend to be concentrated in the Interior Low Plateau of North America along major river drainages (Williams and Stoltman 1965:676). This is attributed to changes in sea levels; sites of this period may be under water or deeply buried beneath alluvial deposits (Garrow and Williams 1980:47). It is, nonetheless, believed that human occupation was not dense in this period, and no Paleo-Indian sites were discovered during the survey of this project area (Brockington 1980:17). An unfluted lanceolate point was reported, however, near the site of the Santee-Cooper Canal in nearby St. John's Parish, Berkeley; and while digging the original Santee Canal in the 1790s, Pleistocene faunal remains were found east of the Santee-Cooper plant site at a depth of nine feet (Herold and Knick 1978:10).

Archaic

The Archaic Period, extending from about 8,000 to about 1,000 B.C., is seen as a long period of human re-adaptation to a changing environment. Conventionally, it has been sub-divided into three phases: Early Archaic (8,000-6,000 B.C.), Middle Archaic (6,000-4,000 B.C.), and Late Archiac (4,000-1,000 B.C.). Not all of these have been documented for the coastal area. Prior to

3,000 B.C., the shoreline lay east of its present location and, therefore, sites formed before that time are under the Atlantic Ocean (DePratter 1975: 10). Nomadic hunting and gathering by small groups, with increasing emphasis on wild plant and fish resources are characteristic for the period as a whole. Caldwell (1958) interprets this period as a trend toward "Primary Forest Efficiency", in which groups became more familiar with the resources of the eastern forests. Population grew, and toward the end of the period, political and economic organization may have become more complex (Brockington 1980:18). Changes in point types form the basis for differentiating among the phases of the Archiac Period.

The Early Archaic phase is seen as a succession of responses to post-Pleistocene conditions. The subsistence patterns have been characterized as hunting and trapping a wider variety of animals, increased reliance on riverine resources, and increasing development of seasonal food gathering (Griffin 1967). The tool assemblages, however, remain unchanged for the most part, from the Paleo-Indian Period, but projectile point forms change from lanceolate to stemmed or notched. Ground stone artifacts and grinding implements are rare or missing (DePratter 1975:4). Early Archaic point types have been systematically recovered primarily in Piedmont North Carolina, Tennessee and West Virginia, although a Palmer corner notched point and a possible Palmer variant were found at the Cal Smoak site on the upper Edisto River in the coastal plain of South Carolina. Point types that may be earlier, transitional or contemporaneous with assemblages at other sites in the upper Edisto River region were also reported in the Atlantic Intracoastal Waterway study (Garrow and Williams 1980:47-48).

The Middle Archaic phase is characterized by a wider variety of ecological niches and a seasonally-based hunting and gathering subsistence strategy (Caldwell 1965). Diagnostic tools include stemmed bifacially worked projectile points and atlatl weights, as well as a marked increase in ground tools for plant processing.

Middle Archaic artifacts have been recovered through Coastal and Piedmont South Carolina and at the sites discussed have. This has suggested a distributional pattern on swamp margins, particularly on terraces overlooking floodplains, marked by decreasing artifact density with increasing distance from optimum settlement zones. Garrow and Williams (1980) recorded two isolated Middle Archaic finds in their survey of the Atlantic Intracoastal Waterways (AIWW) in the tidewater east of the project area. A Guilford projectile point was recovered by a local informant near his home on the Waccamaw River, which is somewhat north of the project area. Garrow and Williams (1980:48-49) also reported a Morrow Mountain II Middle Archaic projectile point, recovered on the eroding beach of Coosaw Island. This had been redeposited by tidal action, and no additional prehistoric artifactual material was noted.

The Late Archaic phase is one of the better documented periods in the cultural sequence of coastal South Carolina. It is characterized by the appearance of shell mounds and shell rings, and, significantly, by the introduction of ceramics. It also indicates the development of a more sedentary pattern and

more complex social, economic, and religious organization (Brockington 1980: 18). Although the survey of the Cooper River Rediversion Canal area did not recover artifacts from this period, Garrow and Williams encountered Late Archaic sites frequently in their survey nearer the coast. These were, however, "predominantly isolated finds or severely eroded artifact scatters" (Garrow and Williams 1980:49).

In coastal South Carolina, Late Archaic sites show Stallings and Thom's Creek ceramics in addition to Savannah River stemmed, Thelma, and Gary projectile points, and a wide range of lithic materials (Anderson, Lee, and Parler 1979: 92). The occurrence of Stallings and Thom's Creek ceramics have generated concern over temporal priorities. In the Savannah River basin, Stallings ceramics were found to be stratigraphically earlier than Thom's Creek (Stoltman 1974:86). On the Edisto River, however, Sutherland (1979) found Thom's Creek to have greater antiquity at Spanish Mount. Though Stallings ceramics still hold the earliest radio-carbon dates (Stoltman 1974), investigators now tentatively agree that the two ceramic groups are coeval. Additionally, it is believed that the Awendaw Punctate, initially identified as a variant of Thom's Creek, but now considered a third ceramic type, dates from a time prior to Thom's Creek and Stallings Island on the basis of a radiocarbon date from an oyster shell. Corroborating evidence has not yet been recovered to substantiate the radiocarbon data (Garrow and Williams 1980:52).

These three ceramic types have been discovered to have a clear distributional pattern throughout the Coastal Plain of South Carolina and Georgia. Fiber tempered wares are popular in the southwest part of the Coastal Plain of South Carolina between the Edisto and Savannah Rivers; they predominate in the Georgia Coastal Plain. Thom's Creek ceramics are absent in Georgia but are widespread in South Carolina, concentrating in the region between the Edisto and Pee Dee Rivers. It has been hypothesized that the region between the Edisto and Savannah Rivers, where both types occur, represents an area where the different cultural groups overlap (Garrow and Williams 1980:52).

The temporal organization of the data is made more complicated by other trends evident in the artifacts. In addition to variations in ceramic styles, investigators have shown variations in cultural assemblages. Bullen and Greene (1970) point out a change in projectile point morphology from large rhyolite forms in the preceramic levels to smaller quartz and flint points in the upper levels of Late Archaic sites. The manufacture of steatite vessels is thought to have begun during the pre-ceramic phase (Stoltman 1972; Griffin 1952). The occurrence of steatite vessel fragments is relatively common throughout the Piedmont Eastern United States, but the transition from steatite to ceramic vessels resulted in a division in choice of tempering. Along the Coastal Plain/Piedmont from New York through the Carolinas, the earliest pottery has steatite particles (Griffen 1952); south of these areas, the earliest pottery has been vegetable tempered. In 1960, both steatite and fiber-tempered pottery sherds were recovered in an archaeological survey of the southeastern North Carolina and northeastern South Carolina coastal area (South 1976), but no steatite-tempered pottery was recovered along the South Carolina coast in the AIWW survey in 1978-1979, although the investigators do not rule out the potential for discovering its presence there (Garrow and Williams 1980:53).

Finally, a Late Archaic model of temporary base camps in which base camps were located near or within coastal marshes or river swamps in order to utilize riverine shellfish resource, has been suggested. Specialized extraction areas were located in the uplands or internal Coastal Plain, and the large shell middens and rings on the coast have been interpreted as focal or primary occupation areas (Stoltman 1972:50). Not surprisingly, since its investigation was confined largely to the sea island/tidewater zone, the AIWW survey recovered information indicating the importance of shellfish in the diet (Garrow and Williams 1980:53).

Investigation at Cal Smoak and other Late Archaic sites in the interior Coastal Plain suggest a somewhat different interpretation. Anderson noted the lack of shell middens at many interior Coastal Plains sites, as well as the diversity of faunal and floral remains at sea island sites of this period, and suggested that subsistence activities continued to follow the exploitation of white-tailed deer and plant resources. On the basis of artifact distribution a more sophisticated social organization composed of endogamous, possibly tribal level groups are hypothesized (Anderson, Lee, and Parler 1979:93-95).

Woodland Period

The Woodland Period dates from about 1000 B.C. to A.D. 1000 and is represented at 38BK76. The earlier pattern of subsistence persists; manufacture of ceramics becomes more widespread; first evidence of systematic horticulture becomes evident, and burial mound construction appears. Group size is believed to have increased, and there was a decided trend toward sedentism. Migration patterns seem to have tended toward scheduled seasonal rounds of group movements, believed to involve segmentation and re-merging of groups in a cyclical fashion. The system derived from an effort to optimize the still-dominant hunting/fishing/wild plant gathering subsistence focus (Brockington 1980:18).

Three ware groups are associated with this period: Refuge, Deptford, and Wilmington-Cape Fear. Refuge ceramics are known from two excavated sites, Refuge (Williams 1968) and Groton Plantation (Petersen 1971), and from scattered surface occurrences along the South Carolina coast as far north as the PeeDee River. Radiocarbon dates place them between 800 and 1200 B.C. (Petersen 1971:77, 80), and they are believed to have developed out of Stallings or Thom's Creek ceramics (Williams 1968). This ceramic type is also believed to be typical of a subsistence pattern that shared the earlier pattern based on shellfish and white-tailed deer associated with the Late Archaic phase (DePratter 1977:11). Refuge phase sites, however, were also found outside the swamp-river system not in association with the shell middens common at Stallings and Thom's Creek occupations. The AIWW survey did not find Refuge type sites, which also suggests a non-marine focus in the subsistence pattern. It is believed that the Refuge phase subsistence base was hunting and gathering rather than shellfish or agriculture, although resolution of this question awaits further information from controlled excavation. It is presently held that Refuge helps bridge the gap between Stallings/Thom's Creek and the later Deptford phases (Garrow and Williams 1980:55). Refuge ware was recovered

during the survey of the Santee-Cooper Power Plant site in St. John's, Berkely, Parish (Herold and Knick 1978:26). Although Anderson found a high incidence of Thom's Creek and Deptford wares in association with Refuge ware, no Thom's Creek-like pottery was recovered at this Berkeley County site although several sherds suggested the presence of Deptford ware (Herold and Knick, op cit).

Deptford ceramics follow the Refuge ware. They are widespread throughout coastal Georgia and southern South Carolina as far north as Charleston (South 1976:1-2). From the vicinity of Charleston north to the vicinity of Cape Fear, North Carolina, the ceramics are dominated by a sherd tempered ware with fabric impressed finish that differed from Deptford surface designs, which are mainly paddle and check-stamped. These ceramics have been termed the Hanover series (South 1976:1-2). South has placed Hanover ceramics in the Wilmington Ware group, signifying an early component of this type, roughly contemporary with Deptford. In South Carolina in general, Wilmington remained entrenched in the coastal area until well into the Mississippian period at about A.D. 1100 (South 1973). In the north coastal area, the Hanover Series Wilmington Ware group pottery was replaced by Cape Fear sand tempered cord and fabric decorated ware (South 1976:1-2). At a later time, Cape Fear sand tempered fine cord marked extended to the Savannah River, where it is known as Savannah Fine Cordmarked, a pottery type within South's (1973) Cape Fear Ware group (South 1976:2).

The different surface decorations are construed to reflect ethnic variation within the underlying population by most southeastern archaeologists. Finding both kinds of pottery in South Carolina has been thought to indicate either the intermingling of separate peoples or the stylistic influence from separate culture centers. Both Cape Fear-Wilmington and Deptford sites were found in the project area in the Cooper River Rediversion survey (Brockington 1980:12-19). The Wilmington ceramic type has been found largely in the area south of Charleston and north of the Altamaha River in Georgia. The AIWW survey recovered evidence of Wilmington occupation in upland areas, and their recovery of a sherd tempered heavy cord marked Wilmington potsherd on the Waccamaw River, about 20 miles north of Georgetown, which is substantially north and east of the present project site, "is possibly the furthest north that a Wilmington component has been recovered and documented" (Garrow and Williams 1980:56). Herold and Knick (1978:26) also found instances of the Cape Fear-Wilmington ware groups in the survey area for the site of the Santee-Cooper Power Plant in Berkeley County, which is west of the present project area; their preliminary findings suggest that Wilmington may have predominated over Cape Fear.

Mississippian Period

The Mississippian Period followed the Woodland Period, dating from about A.D. 1000 to about 1550, the period of European contact. This period may be characterized by intensive agriculture in some areas, sedentary populations, truncated temple mounds, and the development of a highly stratified sociopolitical organization (Garrow and Williams 1980:57). The changes associated with this period are said to be the consequence of the impact of ideas from a Mississippian center located outside this region on the indigenous culture, although this interpretation has tended to exaggerate the differences between

Mississippian and pre-Mississippian periods (Hally 1975:47). As indicated earlier in the discussion of the distribution of Cape Fear-Wilmington ceramics along the coast of South Carolina, there was at least some continuity between the Woodland and Mississippian Periods in this area. The idea of a distinctive, regional Mississippian tradition called South Appalachian Mississippian, moreover, was first proposed by Holmes in 1903 (cited in Anderson 1977:9) and adopted subsequently by Griffin (1967) and Ferguson (1971). Attributes of the South Appalachian province include stamped pottery, burial mounds and stratified society as reflected in burials, village sites and shell heaps, location adjacent to large water courses and in the larger complexes, dependence on the cultivation of maize.

Much emphasis has been placed on the cultivation of maize as a prerequisite for a Mississippian way of life. Historical sources of the period, however, indicate that even at European contact, Indians still depended upon marine resources and hunting and gathering for subsistence. Reference is made to corn in historic accounts, but it has been suggested that there was less dependence on agriculture in coastal South Carolina than in areas removed from the coast as a result of the availability of alternative marine foodstuffs (Garrow and Williams 1980:58).

In addition to the persistence of cord- and fabric-impressed Cape Fear ceramics (South 1977a:2), several other ceramic types have been identified for the Mississippian Period in South Carolina. These include the Charles Town, Mulberry, Fort Watson, Adamson, Pee Dee, Irene, and Savannah types. South (1973) groups these under the all-encompassing ware group termed Chicora, which includes the sand tempered complicated stamped, burnished pottery, often with rosettes, reed punctations, and punctated rim strips (South 1976:28) characteristic of Mississippian sites.

In his report of the survey of the Cooper River Rediversion site, Brockington noted the importance of this area to Mississippian development in this region. He observed, however, that many Mississippian sites had been destroyed without investigation in the creation of Lakes Marion and Moultrie (Brockington 1980:19).

<u>Prehistoric Artifacts</u>

The prehistoric components at the sites were, with one exception, sparse and scattered. A range of Middle Archaic through Mississippian artifacts were found and are listed below by site. Sites 38BK75, 38BK76, and 38BK245 had 276, 1491, and 24 prehistoric artifacts respectively.

The only diagnostic lithic artifacts were a Morrow-Mountain II point of fossiliferous chert and a mid to late Archaic proximal fragment with a stem from the surface at 38BK75; and a Morrow-Mountain II of white chert from Feature F4 at 38BK245. A slate gorget fragment was also found in Feature F12 at 38BK245. Diagnostic material found in historic trash features may show curation of such artifacts by the historic inhabitants, however.

Ceramics were more diagnostic and run the gamut from early Woodland to Mississippian. No analysis beyond description of the prehistoric artifacts was attempted for three reasons.

1. Many prehistoric sites containing structures, burials, hearths, and other features were excavated during the project by Commonwealth and Associates and by the Institute of Archeology and Anthropology.

2. The material at Yaughan and Curriboo was thin and widely scattered, except around Structure 76B, and much of the material came from the surface.

3. No prehistoric features, either postholes or middens, were located despite extensive excavation and mechanical stripping.

The material will be curated and available for future analysis at the Institute of Archeology and Anthropology (IAA) in Columbia, South Carolina.

The material found around Structure 76B is listed separately. This material represents the largest concentration found during the project and is undoubtedly an extension of Site 38BK236, which was excavated by IAA. Sixty-eight percent of the material at Structure 76B was either from the surface or root mat levels. If material from historic features is added to that, the amount of disturbed artifacts reaches a minimum of 75 percent. This high rate of disturbance coupled with a lack of features makes even Structure 76B an unlikely candidate for significant insight into prehistoric settlement/subsistence patterns.

TABLE A-1. Prehistoric Materials Recovered from Historic Sites

	38BK-75	38BK-76	38BK-245	Structure 76B (only) by layers					
				Surface	Root Mat	Dark Grey Sand	Historic Features	Baulks	Total Structure 76B
Angular shatter	19	194	1	13	77	30	13	18	151
Biface thinning flake	162	454	4	10	220	110	34	39	413
Decortification flake	7	122	2	6	69	22	13	7	117
Core	1	24	1	2	16	1		1	20
Biface (or fragment)	24	25	2	2	5		2	1	10
Thumbnail scraper	1	1	1		1				1
Gorget			1						
Mano		9			1				1
Cobbles	4	26			14			1	15
Utilized Flakes		12			4				4
Abraders/poss abraders	19	4	2						
Fire cracked rock	1	14						2	2
End scraper	1	1							
Uniface	1	5		1	1	1	1		4
Celt		1							
Biface blank		3					1		1
Other/unidentified		6	1		5			1	6
Total lithics	240	901	15	34	413	164	64	70	745
Check stamped		93		24	53	3	4	8	92
Fabric impressed	25	107		23	72	8	4	7	114
Incised		1	1						
Cord marked		2							
Complicated stamped	1	4	4						
Plain	10	352	3	62	229	36	11	40	378
Linear check stamp		2	1	2	2				4
Sherd tempered		10			8	1		1	10
Fiber tempered		3		1	1			1	3
Rouletted		9			5		3		8
Other decoration		7		1	4		1		6
Total ceramics	36	590	9	113	374	48	23	57	615
TOTAL	276	1491	24	147	787	212	87	127	1360

APPENDIX B

OWNERSHIP OF THE PLANTATIONS

Yaughan Chain of Title

The earliest known reference to Yaughan Plantation is a document describing a transaction in 1737 between Richard Allein of St. James, Santee, Parish and Edward Thomas of the same parish (Indenture, 27 July 1737, SCHS). It concerns a tract of land measuring 650 acres "known by the name of Yaughan," which was part of a larger 1200-acre tract, located in the Parish of St. James, Santee, bordering on lands of Thomas Ellery (Figure 19). The document is fragmentary, and therefore, it is impossible to decipher all of it. Later transactions, however, allude to the Allein/Thomas exchange and confirm its content.

Yaughan Plantation was then conveyed by Edward Thomas to his son Samuel, who in turn, sold two tracts of land to Isaac Cordes in 1742. One was a 596-acre tract in St. James, Santee, bordering on the Santee River, transferred from Edward Thomas to Samuel in 1740 (Indenture, 27 February 1740, Deed Book R-5, p. 186, RMC). The second was an adjoining 650-acre tract "being part of a larger Tract of Twelve hundred acres of Land. . .commonly called and known by the name of Yaughan" (Samuel Thomas and his wife to Isaac Cordes, 26 January 1742, Deed Book R-5, p. 188, RMC). Isaac Cordes acquired both tracts in the 1742 transaction (Samuel Thomas and his wife to Isaac Cordes, 26 January 1742, Deed Book R-5, p. 188, RMC).

Isaac Cordes died in 1745 (S.C. Gazette, 13 July 1745). In his will, recorded 9 August 1745, he left his plantation in the Parish of St. John, Berkeley, to his only son together with "all other my Lands and real Estate whatsoever" (Will of Isaac Cordes, recorded 9 August 1745, Record of Wills, Vol. 5, 1740-1745, p. 407, CCPL). Land was not appraised in colonial South Carolina as part of probating a will (Main 1965:64), but the inventory of the estate of Isaac Cordes, taken 9 August 1745, lists cattle, oxen, sheep, hogs, horses and some household goods at "Youshan" (Inventory of Isaac Cordes, 9 August 1745, Inventories, Vol 67, Book A, 1732-1746, p. 329, CCPL). Since Isaac Cordes had clearly acquired the plantation three years earlier, this is evidently a mispelling of the name "Yaughan."

John Cordes died in 1756, and his will indicated "all my real Estate to be Equally divided between them," meaning his two sons John (born 1749) and Thomas (born 1753). He stipulated that his estate was to remain intact with the proceeds used to defray the expenses of supporting his wife and five children and educating them. The estate would gradually be partitioned at the marriages of his daughters and when his "Eldest Son shall Attain the Age of twenty one Years" (Will of John Cordes, 20 June 1756, recorded 3 December 1756, Record of Wills, Vol. 7, 1752-1756, pp. 582-583, CCPL). His elder son John (born 1749) received his share of his father's estate in December 1768 (Memorandum, 26 December 1768, Account Book, Estate John Cordes, 1764-1798, p. 69, CC). This evidently included Yaughan. Local tradition claims that John inherited Yaughan by law of primogeniture, which stated that the eldest son acquired all, or a major part of the patrimony, by right of birth (DuBose 1852:50-51). John Cordes (1718-1756), however, clearly left his real estate evenly divided between his two sons; the ambiguity consisted in what lands he owned and which son would inherit which tract.

In addition to a plantation in Berkeley County and to the two tracts (including Yaughan) in Craven County, John (1718-1756) acquired a 1000-acre tract in St. James, Santee, surrounded on all sides by "vacant land" (Royal Grant to John Cordes, 2 March 1752, Royal Grants, Vol. 5, p. 130; Plat for John Cordes, 2 March 1753, Colonial Plats, Vol. 5, p. 280, SCDAH). John Cordes (1749-1798) sold three tracts to his younger brother Thomas (b. 1753) in 1775, consisting of the two tracts that their grandfather Isaac had acquired from Samuel Thomas and bequeathed to their father and a third tract of 500 acres, which was one-half of the 1000-acre grant their father had obtained in 1753. The deed details the transaction thus:

> All that Plantation or Tract of Land containing Six hundred and Fifty Acres situate lying and being in St. Stephen's Parish. . .commonly called and known by the name of Yaughan. . .Also all that other Plantation or Tract of Land containing Five hundred and ninety six acres situate lying & being in St. Stephen's Parish aforesaid Butting and bounding Northwesterly on the aforesaid Tract of Six hundred and fifty acres. . . And also all that other Plantation or Tract of Land Containing Five hundred acres situate lying and being in the said Parish being the Northwestermost half part of a larger Tract of One thousand acres of Land Originally Granted to John Cordes deceased Father of the said John Cordes Party to these presents. . . (John Cordes to Thomas Cordes, Release of 3 Tracts of Land, 10 May 1775, Deed Book R-5, pp. 194-195, RMC).

The will of Thomas Cordes (1753-1806) is not extant, but his widow Charlotte Evance Cordes left "my Property equally among my Children" when she died in 1826 (Will of Charlotte Cordes, 12 June 1826, recorded 27 February 1827, Vol. 37, 1826-1834, p. 238, CCPL). The terms of Thomas Cordes' will may be inferred from her will and a tax return by the Executors of Thomas Cordes' Estate, St. Stephen's, 17 March 1825 (Comptroller General, Tax Return, St. Stephen's, 1824, SCDAH). In this return, Charlotte Cordes signed on behalf of an estate assessed taxes on a total of 1496 acres in the parish. Presumably, this included Yaughan.

In 1836, three daughters of Thomas and Charlotte Cordes: Margaret Catharine, Charlotte Lavinia and Anna Camilla, sold their share of the real estate to Solomon Clarke (Title, 1 January 1836 / 23 January 1836, Deed Book M-10, pp. 221-223, RMC). In January 1850, Clarke sold "all that Plantation or Tract of Land. . .known by the name of 'Yaughan,'" described further as bordering on Corriboo, to J. W. Thurston (Title, 1 January 1850, Deed Book Q-12, pp. 75-76, RMC). Clarke died later that year (Will of Solomon Clarke, 16 October 1850, recorded 11 November 1850, Record of Wills, Vol. 45, Book A, 1845-1851, pp. 771-773, SCDAH). By the mid-nineteenth century, the name "Yaughan" applied to the river section as well; the estate of Solomon Clarke in 1852 sold 880 acres in St. Stephen's, described as being on "Yaughan Branch" and bordering on the Santee River, to John W. Thurston (Title, 9 March 1852, Deed Book V-12, p. 619, RMC)

Thurston sold 182 acres to John Money in 1857, described as bordering "East by lands of J. W. Thurston," and located in St. Stephen's Parish (Thurston to Money, Conveyance, 1 October 1857, Deed Book W-13, pp. 475-476, RMC). Money evidently acquired more land from Thurston, because shortly thereafter he sold 800 acres "known as Yauhan" to Ann E. Platt, which was further described as bounding "to the North on Santee River" (Title, 6 January 1858, Deed Book L-14, p. 244, RMC). Thurston retained part of the old Yaughan Plantation; in 1863, a sale of land contained in Curriboo plantation positioned the parcel on "Lands of the estate of Thurston, formerly of Solomon Clarke called Yahan" (R. Press Smith to H. Panzerbeiter, Title, October 1862, Deed Book R-14, p. 334, RMC).

In 1869, Platt directed that land consisting of "one half of the land contained in the two tracts. . .known as Harleston Hill and Yaughan plantation" be held in trust for William D. Platt and J. C. Lequeux (Conveyance, 17 May 1869, Deed Book H-15, pp. 548-552, RMC). Addison Lequeux became trustee for Platt upon the death of S. D. Russell and in 1891, Lequeux, acting on behalf of Platt, conveyed the "swamp lands of Yahaw [Yaughan] Plantation," which bordered to the east on Curriboo, to Samuel G. Stoney (Lequeux to Stoney, Indenture, 3 January 1891, Deed Book C-2, p. 765, Monck's Corner Assessor's Office; Title, 3 January 1891, Deed Book A-8, p. 10, Monck's Corner Assessor's Office).

In 1906, Platt sold the timber rights of "Yawhaw" to Y. Rittenberg and M. A. Floyd (Platt to Rittenberg and Floyd, Deed & Contract, 16 May 1906, Deed Book C-7, p. 73, Monck's Corner Assessor's Office). After 1909, Platt and his wife sold or gave 106-acre parcels, all part of the old Yaughan Plantation, to their three sons: Lewin Drake Platt, Samuel J. Platt and William P. Platt (Personal Communication, 3 April 1979; Title, 30 October 1909, Deed Book A-31, p. 182, Monck's Corner Assessor's Office; Title, 30 October 1909, Deed Book A-31, p. 183, Monck's Corner Assessor's Office). Samuel J. Platt gave his 106-acre parcel to his nephew J. Lamar Platt (Personal Communication, 3 April 1979); Lewin D. Platt sold his 106-acre parcel to J. R. Coggeshall and J. T. Coggeshall (Platt to Coggeshall and Coggeshall, Title, 5 December 1912, Deed Book A-38, p. 158, Monck's Corner Assessor's Office) in 1912, and William P. Platt sold his 106-acre parcel to a party named Funk (Personal Communication, 3 April 1979). In 1913, Coggeshall & Coggeshall sold the land to L. B. Browder (Coggeshall and Coggeshall to Browder, Title, 29 December 1913, Deed Book A-41, p. 50, Monck's Corner Assessor's Office), who sold it to C. H. Browder in 1920 (Browder to Browder, Title, 13 February 1920, Deed Book A-49, p. 80, Monck's Corner Assessor's Office). In 1974, it was sold to Leo O. Browder, who then sold one-fourth interest to C. Harry Browder in 1975 (Browder to Browder, Master's Title, 14 February 1974, Deed Book A-276, p. 110, Monck's Corner Assessor's Office; Browder to Browder, Title, 22 October 1975, Deed Book A-298, p. 27, Monck's Corner Assessor's Office).

Curriboo Chain of Title

A plat affixed to the indenture conveying Yaughan from Richard Allein to Edward Thomas indicates land to the southeast of Yaughan described as "Curriboo Land: the late John Moore Esq" (Figure 19). According to the 1737 Allein/Thomas transaction, Thomas Ellery had acquired the land belonging to the late

John Moore and thus appears to have owned Curriboo in 1737 (Indenture, 27 July 1737, SCHS). Ellery died the following year but made no reference to Curriboo in his will. He left, however, the vast majority of his estate, both real and personal, to his wife Ann Ellery (Will of Thomas Ellery, 2 October 1738, recorded 7 March 1738/9, Record of Wills, Vol. 4, 1736-1740, pp. 115-116, CCPL).

When Yaughan was sold by Samuel Thomas to Isaac Cordes (d. 1745) in 1742, the description of the 650-acre tract referred to lands southeast of Yaughan "belonging to Isaac and Thomas Cordes" (Samuel Thomas and his wife to Isaac Cordes, 26 January 1742, Deed Book R-5, p. 187, RMC). This is conceivably Curriboo, which had been acquired from Ellery or from his estate by Isaac Cordes and his brother Thomas, known as "Colonel" Thomas Cordes (Richardson 1942(43):137), who had witnessed Ellery's will in 1738 (Will of Thomas Ellery, 2 October 1738, recorded 7 March 1738/9, Record of Wills, Vol. 4, 1736-1740, p. 116, CCPL). When Isaac Cordes' personal property was inventoried in August 1745, the appraisers listed slaves, livestock and "Sundries at Correboo between Coll [Thomas] Cordes and the Estate" (Inventory of Isaac Cordes, 9 August 1745, pp. 328-330, CCPL). By 1745, therefore, the Cordes brothers had evidently acquired Curriboo.

Thomas Cordes died in 1748 and willed "all that my Plantation commonly called Correboo containing about One Thousand three hundred & ninety acres of land the same a little more or less scituate in Craven County" to his second son Samuel (d. 1796) (Will of Thomas Cordes, 25 April 1748, recorded 21 April 1749, Record of Wills, Vol. 6, 1747-1752, p. 142, CCPL). Since inventories did not list real estate, Isaac Cordes may have had only a part interest in slaves and other personal property at Curriboo and no interest in the real estate itself. Alternatively, Thomas Cordes may have severed the relationship between Curriboo and Isaac Cordes' estate after his brother's death. Nonetheless, Curriboo was clearly in the possession of Thomas Cordes at his death in 1748.

Samuel Cordes bequeathed his plantation in St. Stephen's Parish "known by the name of Curriboo" to his eldest son Thomas (d. 1799) in 1796 (Will of Samuel Cordes, 15 May 1796, recorded 29 October 1796, Record of Wills, Vol. 26, Book B, 1793-1800, p. 504, CCPL). Three years later, Thomas Cordes, also known as Thomas Cordes, Jr., to distinguish him from his cousin Thomas Cordes (1753-1806), who then resided at Yaughan, willed three plantations: "Curriboo Plantation with the Pine Land adjoining," "my Plantation and Lands in Saint Johns Parish Berkly County, together with the Plantation called Wiskinboo," to his only son James Jamieson Cordes (b. 1798) (Will of Thomas Cordes, Junior, 1 September 1799, recorded 20 March 1800, Record of Wills, Vol. 27, Book C, 1793-1800, p. 960, CCPL).

In 1845, James Jamieson Cordes, John M. Harleston, T. C. Harlston and E. Harleston sold Charles Macbeth "All that Plantation or Tract of Land Called 'Curriboo'. . .Bounding. . .on Lands belonging to Solomon Clarke, called Yahan," and consisting of 2255 acres (Title, 10 June 1845, Deed Book V-11, p. 45, RMC) (Figure 20). This transaction excluded five acres set aside "for a Burial Ground for St. Stephens Church" (Title, 10 June 1845, Deed Book,

V-11:45, RMC). The obligation of Curriboo to St. Stephen's Parish was longstanding. In 1846, James J. Cordes, John M. Harleston, Thomas Cordes Harleston and Elizabeth C. Harleston conveyed four acres "on which the old Parish Church of St. Stephen stands" to the Parish of St. Stephen, citing a prior grant by the "then owner of the Plantation known as Curriboo" to the Parish of St. James, Santee, for the construction of a chapel of ease. When St. Stephen's Parish was created out of St. James, Santee, in 1754, the proposed chapel of ease became the parish church (T. C. Harleston, atty. for J. J. Cordes, et al. to Parish Church of St. Stephen's, Quit Claim, 16 June 1846, Deed Book X-11, p. 57, RMC).

In 1849, Macbeth sold the entire 2255-acre tract "called 'Curriboo'" to Robert Press Smith (Macbeth to Smith, Conveyance, 16 May 1849, recorded 19 February 1850, Deed Book C-12, pp. 538-539, RMC). The conveyance noted that the plantation included "a Tract of Pine land attached to the above described Plantation as will appear by the will of Thomas Cordes Junr deceased saving & reserving Five acres for a Buryal Ground for Saint Stephens Church. . . ." (Conveyance, 16 May 1849, recorded 19 February 1850, Deed Book C-12, pp. 538-539, RMC).

Smith then began to divide Curriboo Plantation, selling off 1300 acres to the North Eastern Rail Road Company in 1858 (Smith to North Eastern RailRoad Company, Title, 1 May 1858, Deed Book Y-12, pp. 278-279, RMC). In 1862, Smith conveyed 930 acres to H. Panzerbeiter, "being a portion of the plantation called 'Curriboo'" sold by John Harleston "and others" to Charles Macbeth, who then sold it to Smith himself. This tract included the dwelling house, according to an extant plat, and indicated that the "Remainder of Curribboo" lay southwest of the Public Road/Santee River Road (Smith to Panzerheiter, Title, October 1862, Deed Book R-14, pp. 334-335, RMC) (Figure 21). Finally, in 1871, Smith sold 30 acres to Jacob V. Welch, described as "that Tract of Pine Land near St. Stephen Brick Church" (Smith to Welch,Title, 6 January 1871, Deed Book A-16, p. 19, RMC).

The section named "remainder of Curribboo" on the 1862 plat evidently remained separate from those tracts that subsequently assumed the name "Curriboo." In 1897, Elizabeth R. Rickenbaker purchased three tracts of land, totaling 1944 acres, which apparently constituted Curriboo Plantation. The deed read as follows:

> All that certain plantation or tract of land situate partly within and partly near the corporate limits of the Town of St. Stephens in the County of Berkeley in the said State containing Two thousand acres more or less on the southwestern side of the Santee River and bounded Northwest by lands formerly of Thurston known as "Yahan" South west by rest of "Curriboo" formerly of Chas. Macbeth and South East by lands late of Owen and others and consisting of three parcels according to a subdivision made for the purposes of the sale aforesaid. . .all of said plantation being called "Curriboo" (Court of Common Pleas, 21 January 1897, Deed Book Q-54, pp. 53-54, RMC.BC).

Rickenbaker, in 1905, sold the three tracts to Amarentha Carter, explaining further that "said plantation was formerly of my late husband Augustus M. Rickenbaker dec'd; and in the settlement of his estate, was sold and conveyed to me by Joseph Stoppelbein, Esquire, Master in the Court of Common Pleas, for the County of Berkeley. . .January 21, 1897" (Rickenbaker to Carter, Title, 21 November 1905, Deed Book A-23, pp. 145-146, RMC.BC).

In 1912, Carter sold 1100 acres "known as the 'Curriboo' Plantation" to W. H. Lorenz (Carter to Lorenz, Title, 20 February 1912, Deed Book A-37, p. 57, RMC.BC). In 1914, Lorenz sold D. M. Davis 745 acres "partly in the corporate limits of the Town of St. Stephens, known as Curriboo plantation formerly owned by Mrs. A. E. Carter" bounding "North by lands of Montague and Tucker and Platt and Browder, East by lands of the Atlantic Coast Line R. R. Co., and of W. H. Ingram, South by the Public Road leading from St. Stephens to Pineville and West by Public Road leading from St. Stephens to Pineville and lands of Browder, Platt and Montague and Tucker" (Lorenz to Davis, Title, 10 August 1914, Deed Book A-41, p. 192, RMC.BC). Davis sold the entire 745-acre tract to J. E. Bell of Berkeley County in 1918 (Davis to Bell, Title, 16 December 1918, Deed Book A-47, p. 200, RMC.BC). Bell then sold the 745-acre parcel to R. S. Bell of Williamsburg County the following year (Bell to Bell, Title, 29 November 1919, Deed Book A-48, p. 212, RMC.BC).

One month later, in December 1919, Bell mortgaged the 745 acres "being known as a portion of Curriboo Plantation," which he had acquired from J. E. Bell, to W. V. Strong (Mortgage of Real Estate, 27 December 1919, Mortgages B-17, p. 260, RMC.BC). Bell defaulted payment, and Strong purchased the land at public auction (Court of Common Pleas, 16 December 1922, Deed Book C23A, pp. 339-341, RMC.BC). In 1940, Strong sold Joseph Cooper "All that Piece. . .of land. . .being. . .in the County of Berkeley. . .containing seven hundred and forty-five (745) acres, more or less, being known as a portion of the Curriboo Plantation and bounded on the North by lands of Santee Swamp; on the East by lands of Mrs. Ingram; on the South by road known as the Santee River Road, and on the West by lands of Platt. . . ." (Strong to Cooper, Title, 31 October 1940, Deed Book A-66, p. 347, RMC.BC).

APPENDIX C

SOIL TESTS

BIO-CHEM ANALYSTS, INC.

TABLE C-1. Site 38BK75

	Total Organic Carbon	Total Organic Nitrogen	Total Organic Phosphate
75-F30-2	0.8550%	1.098%	0.0064%
75-F31-2	0.3450%	1.335%	0.0041%
75-F31-3	0.2250%	1.398%	0.0001%
75-F32	0.2550%	1.300%	0.0023%
75B-F2-6	0.3600%	1.403%	0.0001%
75B-F5-19	0.3600%	1.367%	0.0020%
75B-F5-21	0.4500%	1.491%	0.0046%
75B-F5-23	0.4800%	1.586%	0.0001%
75B-F5-25	0.4050%	1.450%	0.0007%
75B-F5-27	0.4950%	1.532%	0.0028%
75B-F22-2	0.2700%	1.452%	0.0015%
75B-F25-2	0.3000%	1.537%	0.0050%
75B-F25-3	0.6000%	1.470%	0.0043%
75B-F27-3	0.2400%	1.472%	0.0050%
75B-F29-5	0.7500%	1.487%	0.5901%
75B-F29-6	0.4800%	1.423%	0.0048%
75B-F29-7	0.2550%	1.484%	0.0009%
75F-31-1 (Matrix)	0.2850%	1.454%	0.0001%
75T-U1-5 Level 2	0.6000%	1.584%	0.0002%
75T-U1-5 Level 3	0.2850%	1.492%	0.0040%
75T-U5-5 Level 2	0.4050%	1.485%	0.0038%
75T-U5-5 Level 3	0.2100%	1.334%	0.0001%
75-F1-1	0.1950%	1.615%	0.0065%

TABLE C-2. Site 38BK76

	Total Organic Carbon	Total Organic Nitrogen	Total Organic Phosphate
76-F2-2	1.0200%	1.477%	0.0517%
76-F5-1	0.3900%	1.485%	0.0001%
76-F7	0.3750%	1.572%	0.0020%
76-F8-1	0.9450%	1.637%	0.0878%
76-F8-2	0.7200%	1.876%	0.0960%
76-F10-1	0.2550%	1.228%	0.0600%
76-F12-1	0.3750%	1.534%	0.0297%
76-F13	0.3300%	1.560%	0.0276%
76-F14-1	0.3450%	1.556%	0.1752%
76A-B9-3	0.2100%	1.500%	0.0410%
76A-F33	0.7200%	1.511%	0.0268%
76A-F39-1	0.2850%	1.399%	0.1445%
76A-U19-4	0.3600%	1.516%	0.0177%
76A-U26-1	2.1900%	1.475%	0.0001%
76A-U26-2	0.5250%	1.635%	0.0262%
76B-B20-1	0.5550%	1.457%	0.0001%
76B-F82	0.8700%	1.408%	0.0001%
76B-U39-2	0.1650%	1.403%	0.0001%
76D-F17-1	0.2850%	1.509%	0.0354%
76T-U9-3	0.2400%	1.553%	0.0001%

TABLE C-3. Site 38BK245

	Total Organic Carbon	Total Organic Nitrogen	Total Organic Phosphate
245-F3	0.2700%	1.414%	0.0085%
245-F7	0.7800%	1.502%	0.0001%
245-F12-3	1.0050%	1.474%	0.0001%
245-F12-4	0.6750%	1.563%	0.0001%
245-F62-1	0.7500%	1.580%	0.0001%
245-F63-1	2.2500%	1.552%	0.0001%
245A-AV (Inside Pot)	0.3300%	1.461%	0.0001%
245A-1-2	0.4200%	1.460%	0.0040%
245A-A55	0.3600%	1.471%	0.0001%
245B-F11-3	0.3000%	1.642%	0.0001%
245C-F3	0.2700%	1.527%	0.0001%
245C-F6	0.3450%	1.531%	0.0001%
245C-F7-1	0.4500%	1.497%	0.0001%
245C-F7-12	4.3500%	1.515%	0.0001%
245C-U3-1 (1)	1.8500%	1.639%	0.0175%
245C-U3-2 (1)	1.4100%	1.522%	0.0036%
245C-U3-3 (2)	0.7800%	1.477%	0.0001%

APPENDIX D

ARCHITECTURAL HISTORIAN'S REPORT

LANE GREENE

> Have we not in Africa and in Spain walls of earth, known as "formocean" walls? From the fact that they are moulded, rather than built, by enclosing earth within a frame of boards, constructed on either side. These walls will last for centuries, are proof against rain, wind, and fire, and are superior in solidity to any cement. Even at this day Spai.. still holds watch-towers that were erected by Hannibal. - Pliny's Natural History, Book XXV, Chapter xviii.

The principle of building "walls of earth" is ancient, known to have been employed by the Romans before the time of Christ. The principle, broadly defined, is based on the fact that when certain suitable earth materials with the right moisture content are tightly compressed, they cohere to form a fairly hard, strong and solid body. The means by which the necessary cohesion is obtained may be either by external compaction of a relatively dry earth mixture contained within a system of formwork, or by the natural drying process of water from a wetter earth mixture. Earth walling techniques may thus be classified according to how this cohesion is obtained.

The techniques can be classified into two major categories as follows: Pise de terre or rammed earth, which involves the use of external compaction of the earth mixture within a system of slippable formwork, known as shuttering; and Cob or clay lump, which is the traditional method of building without shuttering.

Pise de terre or rammed earth is a very old and simple method of building. The method consists of compacting the earth mixture by ramming while containing the mixture within the shuttering. The shuttering is raised, lift by lift, until the wall reaches its full height. This technique has been practiced all over the world, and large structures can be found from the Rhone Valley in France, which have stood for 400 years, to the Church of the Holy Cross in Sumter, South Carolina, built between 1840 and 1850.

Cob or clay lump walls differ from those of Pise de terre in the moisture content and plasticity of the material and in the absence of any shuttering. The wall is built up by the simple process of pitching on a soft but cohesive mixture of earth and straw, in layers, until the wall has reached its full height. Tapia and wattle and daub are but variations of Cob walling, as is the production of adobe or sun dried brick, although forming is used to contain the plastic mix in the latter. In all variations of Cob walling the underlying principle is that cohesion is achieved by the "silting" action on drying by evaporation -- small particles settling in between larger particles to form a cohesive mass.

Based on the archaeological evidence gathered at the Cooper River project sites it appears that a great many of the identifiable structures were originally constructed by the process of Cob walling. These structures have been identified as slave quarters and assuming (1) the correctness of this identification and (2) that the structures were built by their inhabitants, one must look to the origin and technological tradition of these builders.

This discussion assumes that the exact point of origin is of little consequence, since the ecological and cultural profile as it relates to building technology is very similar for a vast region of West Africa during the period of consideration.

> From Senegal all along the Guinea Coast and down the western coast of Central Africa there stretches a zone with remarkable consistencies. Along this more than 4,000 miles of coast line and a considerable distance inland the same rain forest environment is encountered. The similarity of ecology is matched by the presence of root crop agriculture -- and that musical systems are also consistent in this region. It is not surprising, then, that the architecture of this far-flung zone should possess basic similarities, too. The "rectangular, gable-roofed hut" is constantly identified with the rain forest environment. (Vlach 1978:124)

Almost every variation of earth walling technique can be found in contemporary West Africa. In Zaire and Cameroon, walls are commonly built of Pise de terre and sun-dried bricks. In Angola, wattle and daub rather than Pise de terre is traditional; although all techniques, including sun-dried bricks are used in construction. In Nigeria the traditional use of earth for building walls is not confined to small houses only, for in the Haussa district, and especially in Kano, large buildings are built of native cone shaped sun-dried brick known as Tubali which are laid with the large end of the cone facing alternately inward and outward and plastered with a clay covering applied to the wall as the work proceeds.

Common to almost all cultures of West Central Africa, however, is the building process whereby a lateritic earth, usually known as "swish", is kneaded into lumps about 6 to 8 inches in diameter, which are thrown down upon each other and pounded to form a compressed course about 12 inches wide by 12 inches high. The wall being brought up, course upon course, in this fashion is then usually plastered, at least outside, with a variety of clay mixtures. Very often, and especially in the vaulted construction of the Haussa district of Nigeria, a form of reinforcement is provided by sticks, poles or palm fronds. Contemporary examples of almost identical building technology of walls built in this manner can be found in the rural areas from the Dogon region of Mali in the inland northwest to Angola in the coastal southwest.

Local technological preferences do little to alter the underlying building technology from district to district within this larger region and as Clough Williams-Ellis stated in 1919; "The older and more skilled craftsmen in Nigeria do not travel far, and instruct only their own children, with the result that after a few generations the methods (of construction) differ only slightly from city to city" (Williams-Ellis et al. 1919:149).

Vlach and others have documented the contribution of African building concepts in the new world in the first half of the eighteenth century. It is reasonable that a people with limited, but uniform technology, transported from one semi-tropical environment to another with similar building materials would in fact build their own first structures in the style and with the technology with which they were familiar.

There remain in this country a few examples of buildings known to have been built by slaves of West African origin which are closely related in technology and appearance to certain styles of West African architecture. Noteworthy are three houses at Melrose Plantation, located on the Cane River near Natchitoches, Louisiana. Built in the late eighteenth century by Marie Therese Quan Quan, a former slave, two of the remaining structures, originally called the Yucca and African houses, can be readily identified with rectangular houses having rammed earth walls and Bamileke-type sloping roofs common to the regions of contemporary Zaire and Cameroon.

Although built of brick, the round slave quarters at Keswick Plantation near Midlothian, Virginia, provides a very fine example of the cylindrical or beehive houses common throughout sub-Saharan Africa and demonstrate the influence of transplanted African architecture on colonial plantation buildings.

The interpretation of the physical evidence of structures gathered at the Cooper River project site must be considered as conjectural in that little or nothing of the original building fabric was recovered. The evidence forms the basis for the hypothesis but alone is insufficient to support it. The following suppositions, by building elements, are based more on logic and the application of similar technological parameters than on actual facts.

Foundations

The system of trenches and postmolds recorded at Yaughan and Curriboo is not completely consistent with the implied technology. The postmolds within, along side and outside the line of trenches is open for further research but for the scope of this report will be considered as evolutionary within the life of the structure, i.e., the original configuration most probably having been a system of vertical wood post reinforcement within the thickness of the Cob walling.

The function of the trenches is interpreted as a structural consideration to account for lateral thrust imposed on the side walls of the various structures and in turn suggest a gabled roof configuration. The arrangement of the trenches in parallel pairs without end returns to complete the rectangle further supports this hypothesis.

Walls

The wall construction implied by the evidence is mud or Cob walling, most probably constructed as detailed earlier in this section of the report. Unfortunately, the cohesion of mud walling is a reversible process when

exposed to weather action and this has destroyed any measurable evidence. The assumption of mud wall construction with vertical wood post reinforcement is consistent with both the traditional technology of the builders and the available materials. The top of the side walls would most probably have included a wood log plate member to which roof rafters would have been secured. These plate members may have been secured by being embedded in the top of the last mud course, or by being lashed to the projecting vertical wood post reinforcing members, or both.

The end walls of the structures are less easily understood. As stated earlier, the foundation can be interpreted as implying a gabled roof configuration. The construction of a gabled end wall in mud is, however, not only difficult but inconsistent with both the need to protect such walls by a roof overhang and the African tradition of hipped or partially hipped roof construction. The end walls may have been gabled mud walls, flat topped mud walls, walls of some other material such as reed matting or entirely open. The evidence is insufficient for conclusion.

Roofs

Possible roof configurations are discussed above. Probable roof construction would have employed wood pole rafters bearing on wall log plates with overhanging eaves and a substantial pitch (possibly 12 on 12). Pole purlins would have then been secured to the rafters at some interval consistent with the roof covering and the roof covering applied. Possible roof coverings would include: thatched palmetto fronds, thatched sweetgrass, and split boards. Tradition and availability of materials would indicate palmetto fronds as the most probable choice and split boards as the least probable.

Room Arangement/Building Proportions

Comparative building proportions are treated statistically elsewhere in this report and generally fall within the established traditional African preference for the two room, double square module. These "duplex" modules would have most likely housed two family groups - one family, one room. No evidence of indoor fireplaces or open hearths was discovered, leading to the assumption that cooking was done either out-of-doors or in some yet unidentified central cook house or cook shed.

Wall Openings

Construction difficulty, tradition, and security all indicate that wall openings would have been minimal. A single doorway perhaps being the only source of entry, light, and ventilation. Window openings, if present, would most probably have been small and located at the top of the wall in order to eliminate the need for constructing a lintle over the opening. Doorways, similarly, would probably have been narrow but full height of the wall to avoid the problem of constructing the lintle over the opening. Doors and window shutters would probably have been later refinements to the original unsecured openings. Evidence was recovered to indicate that very little window glass was present in any of the structures.

Non-conforming Structures

A certain number of building imprints did not conform to the preceding interpretation in that they did not contain trench foundation features. The possible superstructures for these structures could include: open sided sheds, framed and sheathed structures, and different technology of mud wall construction. A certain percentage of open sided, roofed sheds would be expected in any such agrarian compound. Construction of these sheds would most probably have been a simple post and lintle system with roof construction similar to that indicated earlier.

Other structures indicate by rectangular or square postmolds that they were most probably much more technologically refined and were probably frame structures with wood plank sheathing. No speculation is offered as to roof construction or roof coverings for structures within this category.

A possibility of mud wall structures constructed without trench foundations is also possible for structures within this category, in which case the preceding interpretations are applicable.

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APPENDIX E

ARTIFACT APPENDIX

This discussion of the artifacts includes those types which were either minority types or types which by themselves provided little conclusive data on the slave occupation. Some of the data presented here has been used in the body of the report to compare with Colono ceramics or to illustrate the function of features and structures. The purpose of this appendix is primarily to give the background necessary to understand the data presented in the artifact patterns in Chapters VII and IX.

Non-local Ceramics

Porcelain was present at all sites and was divided into four types, Blue on White Oriental Porcelain, Polychrome Overglaze Oriental Porcelain, Plain Oriental Porcelain, and European Porcelain. A breakdown into more types, as done by South (1977a:210) was impossible due to the small sherd size. The size of the sherds prohibited any detailed study of motif, upon which much of South's and Noel Hume's (1972 and 1978) studies appear to be based. Our typology more closely followed that of Miller and Stone (1970:82-94), which is more practical when dealing with small fragments.

Sorting criteria for the four types were based on glaze and paste properties to differentiate Oriental from European types and decoration techniques to distinguish types within the larger groupings. Oriental porcelain was identified by a hard, concoidally fracturing paste with little or no distinct translucent glaze on the interior and exterior surfaces. European porcelain, so-called because the specific country of origin is unknown, was distinguished on the basis of a softer paste and a distinct glaze. Only three sherds of European porcelain were found.

The three Oriental porcelain types were differentiated by handpainted blue on white underglaze decoration, handpainted polychrome overglaze decoration, and plain Oriental sherds exhibiting no decoration. None of the European porcelain sherds showed decoration.

Stoneware was divided into 14 types based on paste color and surface treatment. Two of these 14 types were unidentified stoneware, one gray bodied and the other brown, which may have been late on the sites and may have represented a variety of American stoneware types. The wide variety of surface finish and the overall small quantity of these types made a detailed typological study impossible. The descriptions for British Brown, Nottingham, Burslem, Rhenish or Westerwald, Black Basalt, and all but one of the White Salt Glazed Stonewares are adequately described in the literature (South 1977, Noel Hume 1978, Miller and Stone 1970), and do not require further description here. However, three types of Refined Red Stoneware and one type of White Salt Glazed Stoneware deserve special mention.

The definition of unglazed Refined Red Stoneware followed that given by Miller and Stone (1970:70-81). Along with this type were are two other distinct types with the same paste: Clear Glazed Red Stoneware and Marbled Glaze Red Stoneware. The first was exactly like Refined Red Stoneware in paste, texture, and porosity, but occasionally had parallel wavy lines

incised into the body before application of the clear, probably lead, glaze. The second type had the same paste, texture, and porosity as Refined Red Stoneware, but had a glaze or more properly a slip glaze, which gave the surface an agateware quality. Both of these types were minority types. The first was represented by three sherds and the second by two.

White Salt Glazed Stoneware was represented by the easily recognizable Plain White Salt Glazed plates, by Scratch Blue, Debased Scratch Blue, and by one example of a fourth type not described by South (1977), but noted by Miller and Stone (1970:72-74), i.e. Handpainted Polychrome White Salt Glazed Stoneware. This single sherd had an overglaze floral motif.

Earthenwares were divided into several subcategories based on paste color and texture, and surface finish. These were Refined Earthenware, Redware, Slipware, Creamware, Pearlware, Whiteware, and Coarse Earthenware.

Refined Earthenware included two types, Jackfield and Plain Agateware, which have been adequately described in the literature (South 1977:210). Coarse Earthenware was divided into two types already established in the literature: Buckley, a coarse Agateware with a laminated dark red and yellowish paste, and North Devon, a grit tempered type with a greenish glaze. Buckley was represented by four sherds and North Devon by three, and were definitely minority types.

Creamware and Pearlware accounted for 48 percent of the nonlocal ceramics at all three sites. Sorting criteria are fairly well established for the types included in these groups (South 1977, Noel Hume 1972 and 1978). Virtually all of the Plain Creamware, including "Queen's Ware, Royal Pattern", etc., found at the sites was light yellow; only two sherds of dark yellow were recovered. No Carolina Creamware was recovered, and only one sherd of green Edged Creamware was found. The remaining Creamware types were classified on the basis of easily recognized and replicable criteria, which may or may not correspond to names used by various authors. For this reason, more complete descriptions of these types are included here.

Clouded Creamware refers to creamware vessels decorated with brown slipglaze. Noel Hume (1972:125) refered to this as "clouded" or "tortoise shell" decoration (also Smith 1967). South (1977:211) also refered to this type as Clouded Ware, although Miller and Stone (1970:64) used the term "Whieldon-Wedgewood type". Polychrome Creamware (Miller and Stone 1970:48) was an overglaze polychrome, generally with yellow, black, purple, and brown hand painted decoration. The handpainted motifs were necessarily incomplete on the Cooper River material, but appeared to be lines and curves making up larger geometric and perhaps floral designs. South (1977:212) refered to this as "Overglaze Enamelled Handpainted Creamware". Marbled Creamware described the swirling together of various opaque colors (often dark and light brown and white slips over a base of light brown) in restricted areas of the exterior surface. This type appeared to be or develop into, a subset of the annular types since the decorated zones were often restricted by annular designs above and below. South (1977:212) used the term "Finger Painted Wares" to describe this type. Green Creamware was best described and illustrated by

Miller and Stone (1970:Figure 67) and in our sample the type had a green slip incorporating black dots in black circles under the glaze. One sherd of Green Creamware had a nonporous body which may have indicated overfiring or post-use firing.

The Pearlware types had many of the same type names as Creamware. This should not be surprising since Pearlware was in many respects a continuation of Creamware. The sorting criteria for Edged Pearlware with the addition of blue edges; Marbled, with the addition of reds and blues; and Polychrome were essentially the same as for the Creamware types. However, there were new types in Pearlware not appearing in Creamware. Blue Handpainted Pearlware (South 1977:212) and a Brown Handpainted Pearlware were added in the collection. Also for the first time in the assemblage Transfer Printed (usually blue) decoration appeared. Annular Pearlware with and without Marbling and Mocha decoration increased greatly over its rare use in Creamware. Eleven percent of the Pearlware sherds had annular decoration compared to 16 percent for Transfer Printed and 16 percent for Edged Pearlware. Plain annular decoration (excluding Marbled or Mocha) accounted for only 5 percent of the Pearlware sherds. This ran counter to the high frequency of annular types noted by Otto (1975:162) at slave quarters on St. Simons. Forty-seven percent of the total Pearlware sherds had no decoration and were catalogued as Plain Pearlware. These sherds were probably from decorated vessels for the most part (Miller 1980), but could not be identified as belonging to one type or another.

A major problem encountered whenever Creamware, Pearlware, and Whiteware are found together is discriminating between the plain types of these wares (Price, 1979). As noted by Noel Hume (1972:217-254) and others, the yellow glaze and offwhite cast of the Creamware body evolved into a lighter yellow glaze and whiter body in some potteries by the time of the introduction of Pearlware. Pearlware was an attempt to make ceramics more reminiscent of porcelain and to achieve this effect cobalt was added to the glaze to reduce the yellow cast, and at the same time the whiter body (from the addition of chert to the paste (Noel Hume 1972:233)) was developed. The result was a whiter ceramic, often with a bluish cast where the glaze puddled. Both Creamware and Pearlware were here by the cast of the glaze (yellow to yellowish green for Creamware and robin's egg blue for Pearlware) and to a lesser extent by body color (a warm offwhite for Creamware and white for Pearlware). If it were not for whiteware, the problem of differentiation would have been a simple one. Whiteware presented additional problems, a variety of glaze tints, body colors, and the problem of porosity.

It had been originally thought that porosity was exclusive or nearly exclusive to Creamware and Pearlware, and that, therefore, any sherds exhibiting porosity were not Whiteware by default. Although mid to late nineteenth (and all twentieth) century Whitewares tended to become more and more nonporous over time; in the period of the Pearlware to Whiteware transition (first half of the nineteenth century), porosity is not a useful tool for differentiation. This was forcefully brought home when complete sets of Whiteware from the Washington D.C. Civic Center (Garrow et al. 1981) site were compared

with the Cooper River material. These vessels, with makers marks identifying them as "Stone China", were as porous as known pieces of Creamware and Pearlware; and, like Creamware and Pearlware, exhibited a range of porosity. It was finally decided for purposes of classification that sherds exhibiting no porosity would be classified as Whiteware, while porous sherds would require other sorting criteria.

The other criteria were body and glaze color. In some cases, the Whiteware body, though porous, was whiter than Pearlware. There was a dead white quality about Whiteware difficult to describe. Unfortunately, this distinction was too small to be objectively determined by the Munsell Color Charts (1975). The second criterion was glaze color, which was influenced by the underlying body color. Rather than the robin's egg blue of Pearlware, Whiteware had a grayer cast and was not as "warm" as Pearlware. This distinction, too, was impossible to detect with standard Munsell Color Charts (1975). It was felt that especially on earlier Whitewares (until mid-century), the glaze was identical or similar to that of Pearlware, but that the dead white body played a large role in changing the quality of the blue cast to a grayer tint. Miller (1980) corroborates this impression and researched the question of the Pearlware-Whiteware transition much more thoroughly than is required here. Lofstrom (1976:8) felt, however, that the shift in the blue tinted glaze on Whiteware was the result of the development of a lead free glaze which did not come into popular use until the early 1830s. We tend to agree with Miller's approach that the development of Whiteware involved a series of changes in the glaze and the body, making any distinctions between the two types difficult and basically a useless exercise after the first quarter of the nineteenth century. The term Whiteware referred to the early Whiteware transition sherds which could no be clearly separated into Whiteware or Pearlware. True Whiteware and Ironstone were found in surface scatters at all sites and were not included in this analysis.

The decorated types of transitional Whiteware were similar to those of Pearlware, as might be expected, although they were easier to sort from Pearlware than the Plain type. Blue Handpainted, Edged, Transfer Printed, and Polychrome Whiteware had essentially the same descriptions as those of the Pearlware types.

Undoubtedly, many of the plain Whiteware sherds were identified as Pearlware as a result of the sorting criteria. The relative frequencies of the decorated varieties of Pearlware and Whiteware, which were easiest to consistently identify, were 95 percent and 5 percent respectively. However, among the plain types, the relative frequencies were 99.6 percent and .4 percent, respectively. This indicated that something over 4.6 percent of the plain Pearlware sherds were misidentified and should probably have been called Whiteware. Since the Whiteware sherds were coeval with the late Pearlware sherds, such mistakes in classification probably did not greatly affect chronological studies, and in fact may have enhanced them, since mean ceramic dates for Whiteware all postdated the terminal occupation of the sites (South 1977, Bartovics 1977, and Lofstrom 1976).

Tin glazed earthenware, referred to here as Delft, was classified in a manner similar to that used by Miller and Stone (1970). All sherds with a soft

porous body, a tin glaze, and no decoration were included in the Plain type with the exception of sherds definitely associated with Debased Rouen Faience as described by South (1977) and Miller and Stone (1970). Decorated sherds were sorted by the technique of decoration into types. Further division into varieties based on motif was impossible due to the small size of the sherds. All sherds with handpainted blue decoration were included in the Blue and White type. Those with two or more different colors, usually a combination ofblue, red, or green, were included in the Polychrome type. Eleven sherds had powdered manganese purple on the interior or the interior and exterior. Rims of this Powdered Delft often had a poorly painted horizontal blue line on the interior as described by Miller and Stone (1970:40-42). Only two sherds definitely attributable to Debased Rouen Faience were recovered. These had a thin poorly applied tin glaze allowing the pink body to show through, giving an uneven pinkish cast to the glaze. The interior rims were decorated with wavy yellow lines. As various authors have stated, without complete vessels, attributions as to country of manufacture are generally misleading. Unfortunately, we have come to the same conclusion here.

The remaining ceramics and other Kkitchen Group artifacts are described in Chapter VIII as they provide more direct evidence on slave lifeways and culture change.

Architecture Group

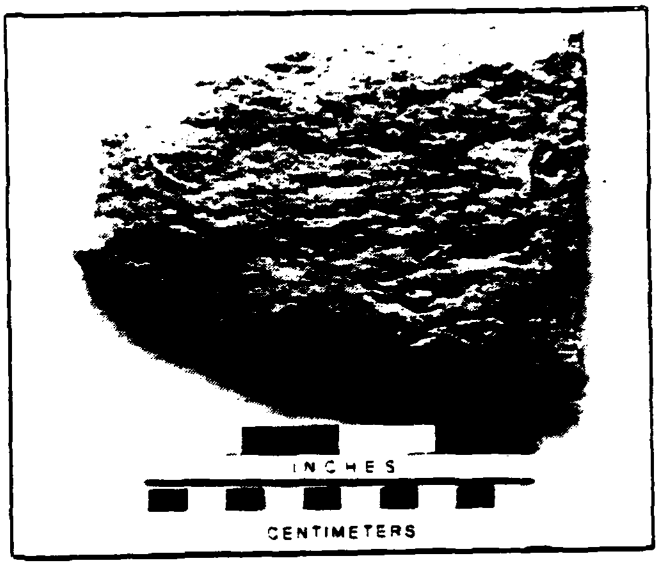
The architecture group artifacts include nails, bricks, mortar, daub, flat glass, and hardware. Flat glass was examined to detect crown, cylinder, and plate glass. However, most sherds were so small that such a distinction could not be made. For this reason, all flat glass was lumped together. Such glass, presumably used for windows, never accounted for more than 3 to 8 percent of the architecture group artifacts, except at 245C, where it made up over 17 percent. While no attempt was made to reconstruct window panes, it can be safely stated that none of the structures except 245C had enough glass to make more than one pane. Due to the natural variation in crown glass, a minimum pane count was not attempted either. Poor preservation at the sites also precluded identification of more than a small percentage of the nails. Although these were examined and, in some cases x-rayed, the nails could only be broken down into wrought, cut, and unidentifiable.

The door lock plate at 38BK75 is virtually identical to a plate stock-lock of the eighteenth century illustrated in Figure E-1 and by Noel Hume (1978:Figure 77b). Unfortunately, it was not found in association with a structure. Other architectural hardware consisted of hinges, pintles, a possible shutter dog at Structure 245C, and door locks (Figures E-1 and E-2).

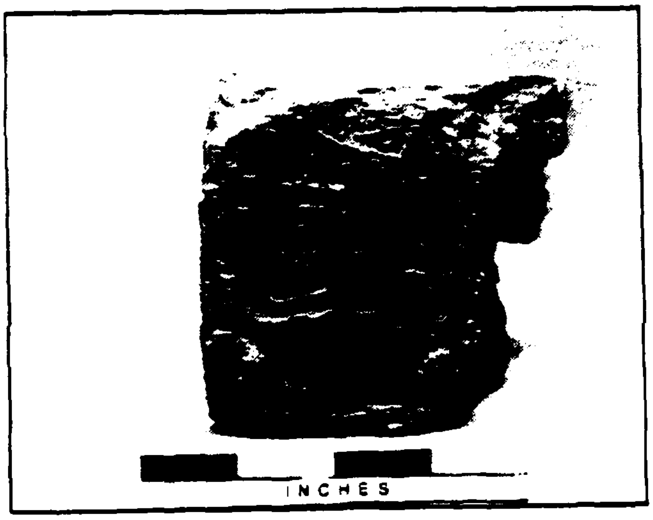
Wood artifacts included posts, discussed by structure in Chapter VII, and a wooden peg, measuring 2" by 1/4" recovered from the cellar at Structure 245C. While wood definitely played an important role in the architecture, preservation prevented analysis of woodworking methods to any extent.

The bricks are discussed in some detail since they were a source of income at Curriboo Plantation. All of the bricks at Curriboo and Yaughan were apparently made in the same way. A frame, probably of wood, was constructed that was open on the top and bottom. Sand was sprinkled on a flat surface,

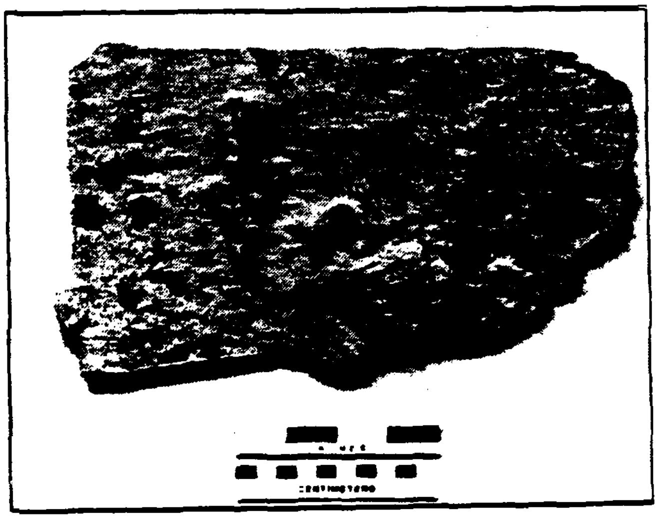
DOOR HINGE



CLOTHING IRON

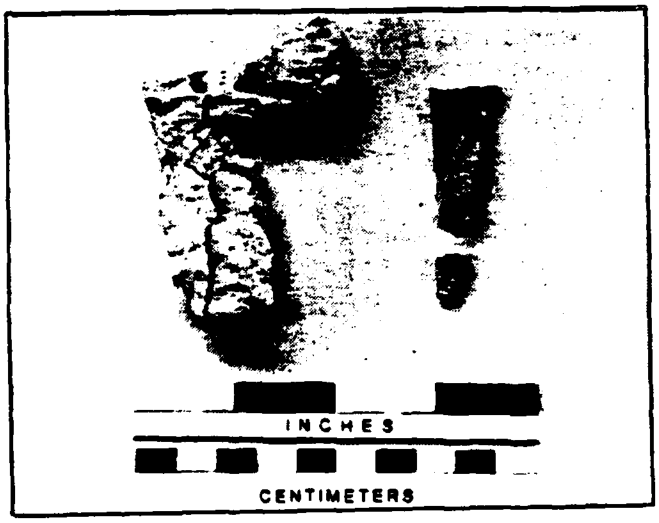


BRICK



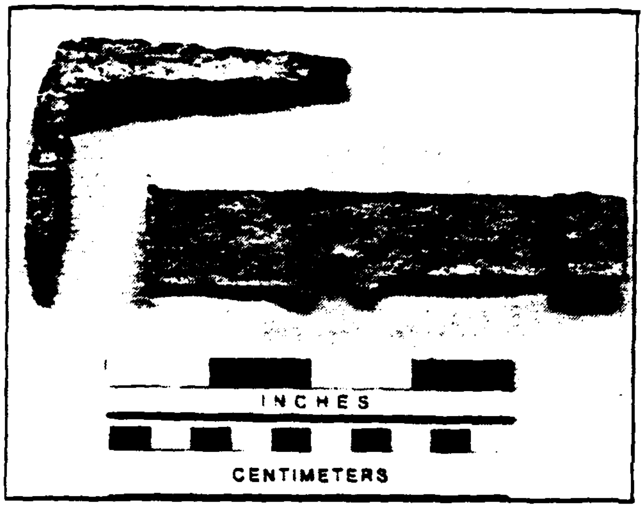
STOCK LOCK

DOOR HINGES

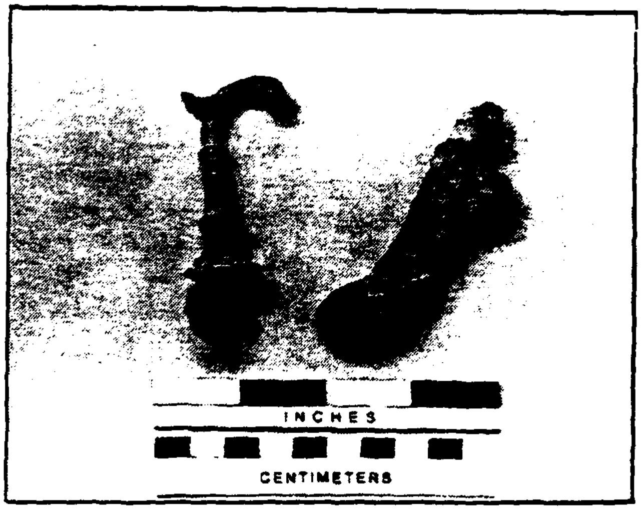


LEFT-SHUTTER DOG (?)
RIGHT-DECORATIVE BRASS HORSE TACKLE

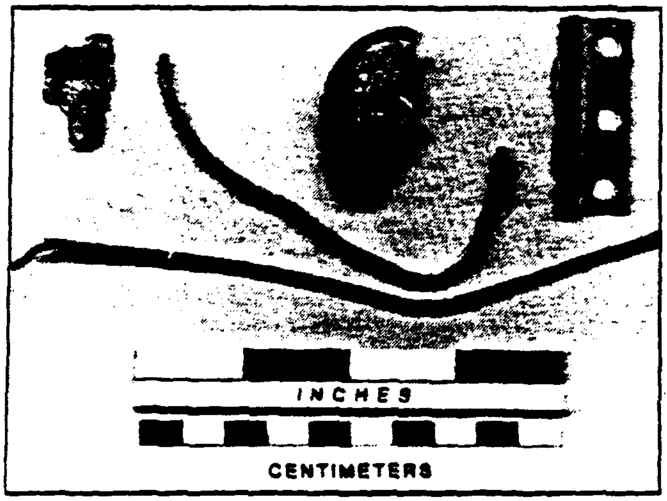
FIGURE E-1
Architecture and Other Artifacts



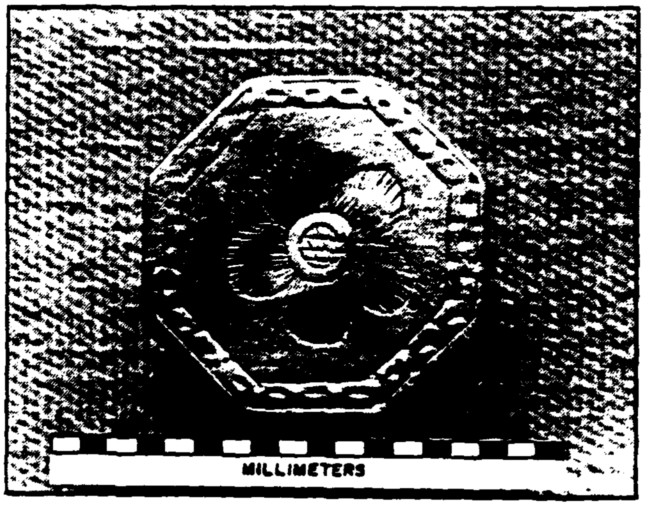
SHUTTER HINGE, LOCK BOLT



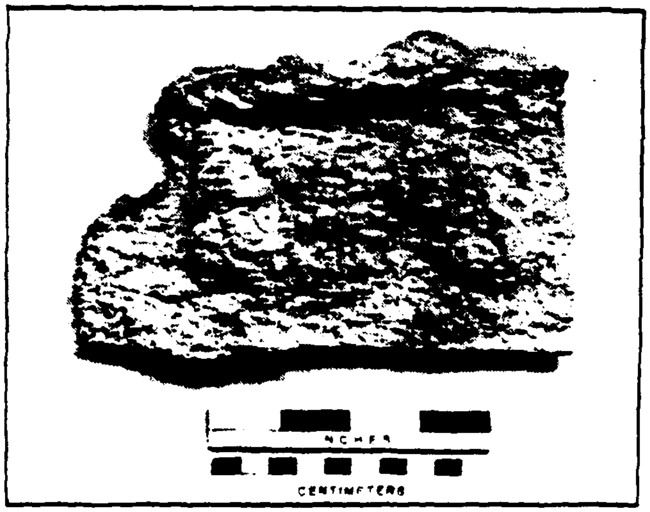
FURNITURE HANDLE, CLASP KNIFE



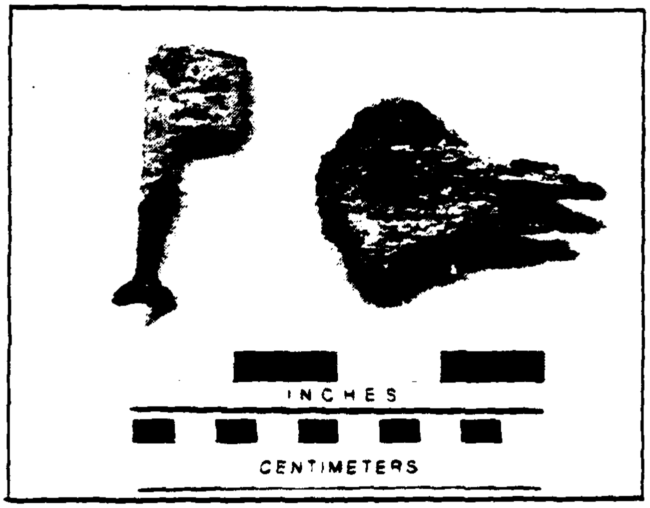
STAMPED FLAT BRASS, BOTTLE SEAL, HINGE AND UMBRELLA STRUTS



GOLD BUTTON

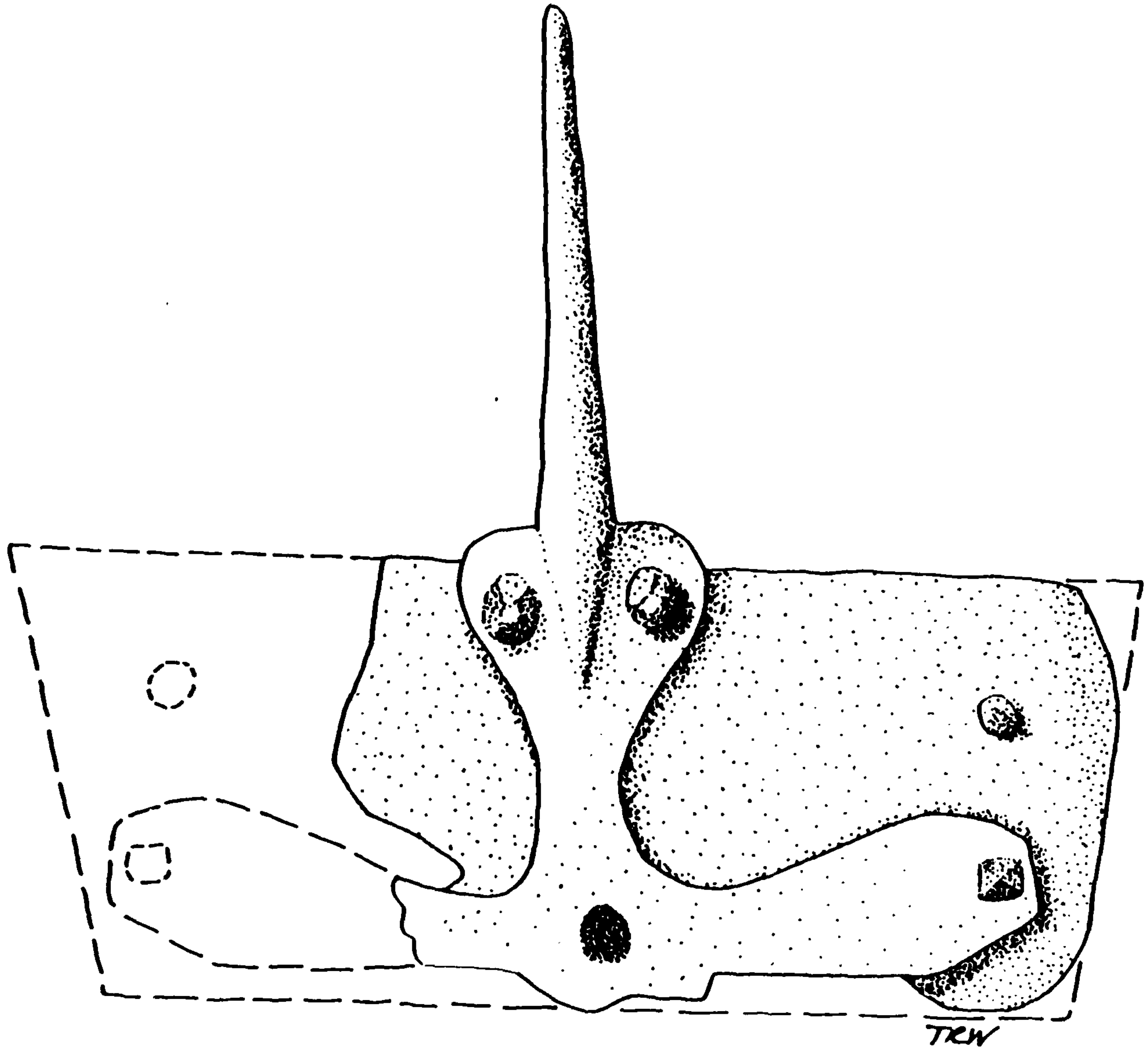


CHEST LOCK



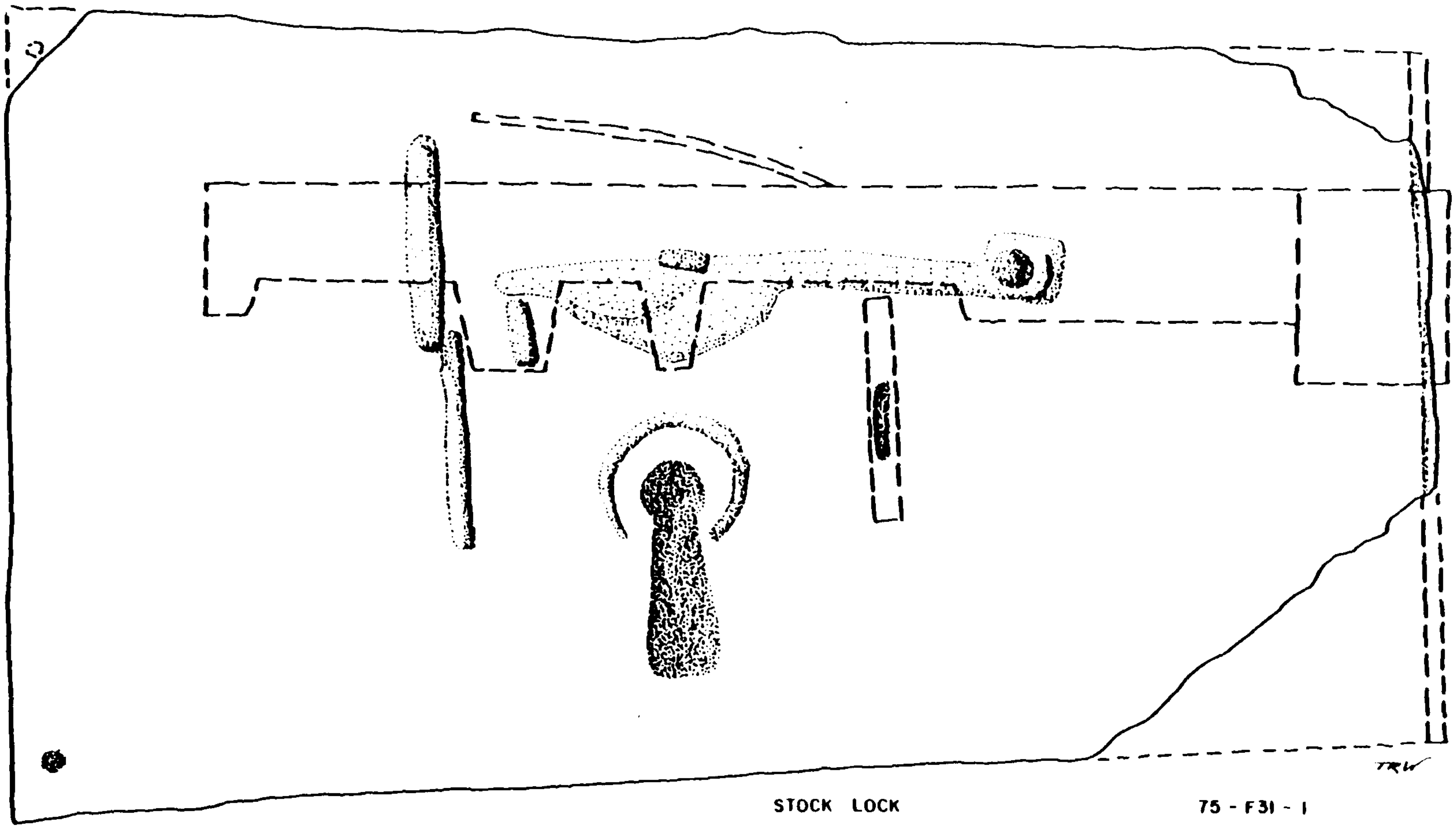
KEY, JEW'S HARP

FIGURE E-2
Architecture, Kitchen, Furniture, Clothing and Personal Group Artifacts



75B - F29 - 1

FIGURE E-3
Door Hinge
Identified
by X Ray



65 % Actual Size

FIGURE F-4
Stock Lock
Identified
by X Ray

probably the bare ground, and the frame placed on the sand. Clay was mixed with water to a mortar-like consistency and then placed in the frame. Using his hand or a flexible tool, the brick maker wiped off the excess clay from the top of the frame, leaving it slightly indented and striated where sand and pebbles were dragged along the surface. The frame was removed while the clay was still fairly soft, allowing the brick to slump and making it slightly wider at the base and slightly shorter. The original underneath side had impregnated sand from the sand placed on the ground before the frame was set up. Once sun or air dried, the shrunken bricks were collected and stacked for firing.

Given the above (and it was clear that the bricks were not made in a closed mold, i.e. with an enclosed bottom), then the validity of the height, width, and length measurements should not have been equal. The variation in height was determined by two independent factors, how deeply a brick was gouged on the top and by subsequent slumping; and the width and length by only one variable, the amount of slumping. Therefore, the width and length, where the latter could be measured, were the most valid measurements for comparison.

The data on the bricks was organized by width and height and when possible length. Comparable data on bricks could not be developed from coastal South Carolina, and information provided in Noel Hume (1978:81), refered to England and the mid-Atlantic region, i.e. Virginia.

Data from the surface collection at the owner's house west of Site 38BK75 (i.e. 38BK75 Locus B) is given in Table E-1 for comparison, but the sample was too small for statistical analysis.

Table E-1. Brick Measurements (in inches)

	Structure 245K	Structure 245C	75 Locus B (Owner's House)
	WIDTH		
Mean width	4.11	4.19	4.29
Standard deviation	0.1224	0.1956	0.2103
Number Measured	131	39	8
	HEIGHT		
Mean height	2.96	2.96	3.35
Standard deviation	0.2023	0.2062	0.0768
Number Measured	131	39	4

LENGTH			
Mean length	8.48	8.39	8.52
Standard deviation	0.2805	0.2419	N/A
Number Measured	3	23	1

The conclusion drawn from these data was that the bricks produced at the kiln (Structure 245K) could have been used in the construction of the office (Structure 245C).

Furniture Group

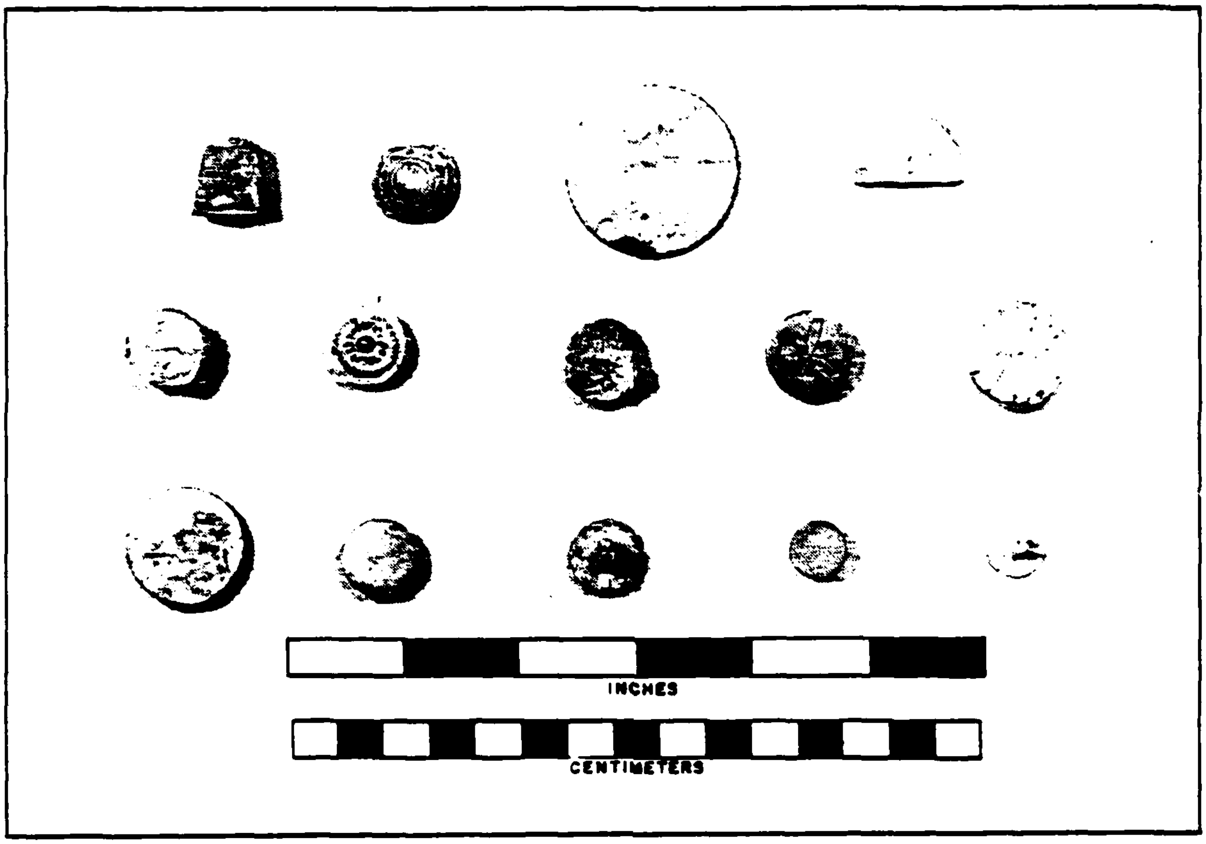
This, along with the personal group, had the lowest frequency of any of the groups at the sites. This was undoubtedly due to the low incidence of slaves owning extensive amounts of material goods at Curriboo and Yaughan.

The furniture hardware was primarily made up of tacks with a restricted assortment of small drawer or cabinet door pulls, latches, a hinge, and brass decorated items (Figures E-2 and E-5). The following chart gives a breakdown by site and type.

Table E-2. Furniture Hardware

	Tacks							
	Brass	Iron	Other	Brass Hinge	Brass Pulls	Brass Latches	Brass Decorative Items	Total
38BK75			2	1			2	5
38BK76	2	4	2		2	1	1	12
38BK245	1		2			1		4

The "other" category of tacks were heavily oxidized and may have been iron. The tacks were included in furniture since all had large heads reminiscent of upholstery or decorative tacks. The latch parts consisted of a piece of stamped flat brass with a hook on the end, measuring approximately one inch and a loop with a screw shank into which a hook would have fit. The presumed drawer or door pulls were only fragments and may have been some other decorative item. The decorative items at 38BK75 were flat brass with stamped floral designs such as might have appeared on the corners of chests. At 38BK76, there was a concave piece of brass with stamped decoration which may have attached to the end of a leg of furniture (or possibly a cane). Most of the material from Site 38BK76 came from Structure 76B. The remainder of the material was too infrequent at any of the sites to recognize any clear distribution pattern. It should be noted that a chest lock is discussed in the section on the Activities Group locks following South (1977a).



TOP ROW - THIMBLE, DECORATIVE BRASS CANE TIP(?), 2 WHITE METAL BUTTONS
MIDDLE ROW - LEAD BUTTON, BRASS BUTTON, LEAD BUTTON, BRASS BUTTON, LEAD BUTTON
BOTTOM ROW - 2 WHITE METAL BUTTONS, LEAD BUTTON, 2 WHITE METAL BUTTONS

LEFT TO RIGHT - GRAPHITE OBJECT, ASSORTED BUCKLES

FIGURE E-5
Furniture and
Clothing Artifacts

Clothing Artifacts

Clothing artifacts consisted primarily of buttons, although buckles, a thimble, straight pins, bale seals, and glass beads were also recovered (Figure E-5). The following table lists the buttons following the types proposed by South (1977:100) and one type from Olsen (1963:Figure 1).

Table E-3. Buttons

South Type	38BK75	38BK76	38BK245
4			2
6	1		
7	9	7	2
8	2	3	1
9	8	7	1
11	1	4	2
13			1
18	3	1	
F*	1		
7 or 8		8	
Unknown	4	8	4
Total	29	38	13

*Olsen's (1963) type F

These button types were given general date ranges by Noel Hume (1978:88-92) and Olsen (op. cit.). Types 4, 6, 7, 8, 9, and 13 dated between 1726 and 1776. Type 11 dated between 1726 and 1865; Type 18 between 1800 and 1865; and Type F between 1812 and 1830. These dates are only approximate and, except for Olsen's Type F, were dated from archaeological contexts. Nevertheless, the following chart indicates that 38BK76 and 38BK245 were probably earlier than 38BK75 on the basis of the buttons.

Table E-4. Dated Buttons

	Buttons		
Date Range	38BK75	38BK76	38BK245
1726-1776	20	25	7
1726-1865	1	4	
1800-1865	3	1	2
1812-1830	1		

The preponderance of plain round buttons was not considered exceptional on slave sites. The gold button found at Structure 76A, however, was extraordinary. According to Lucille Weingarten (personal communication, 1979), the

button, "is of European origin, probably French, from a man's vest or waistcoat, pre-19th century". Isaac Cordes' inventory listed gold buttons at his death in 1745. From that time on, however, small personal items were not mentioned in the inventories. It is possible that the gold button from Structure 76A had originally been in the Cordes family. Other clothing group artifacts were not as numerous.

Table E-5. Other Clothing Artifacts

	38BK75	38BK76	38BK245
Buckles	2	6	2
Straight pins		1	1
Thimble		1	
Bale seals			2
Glass beads	1	20	3

The straight pins were brass with applied beads. The thimble was notable for its resemblance to the "thimble impressed" decoration on a Colono sherd. The bale seals, one with brass wire attached, implied the processing and shipment of cotton. The beads are described separately in Appendix F, as they were analyzed by Marvin Smith.

Personal Group

With the furniture group, this group of artifacts had the lowest frequency of occurrence at any of the sites (Figure E-2). One coin was found for the entire project at Site 38BK75. This was a 2 reale piece minted in Mexico in either 1758 or 1768 and in very worn condition. Three keys were found at 38BK76 and one at 38BK245. Other personal items were two umbrella struts from Feature F29 at 38BK75 and a brass finger ring from general excavation. At 38BK76B, there was a piece of twisted lead possibly used as a pencil and, on the surface, a piece of metal backed mirror. These artifacts gave mute testimony to the lack of material goods owned by the slaves at all three sites.

APPENDIX F

BEAD ANALYSIS REPORT

MARVIN SMITH

GLASS BEADS FROM THE COOPER RIVER REDIVERSION CANAL PROJECT

This report will present a descriptive and comparative analysis of 25 glass beads recovered from three plantation sites in the South Carolina Coastal Plain. Twenty-one of the beads came from one site, 38BK76, while two other sites, 38BK75 and 38BK245, accounted for the remaining four beads. Beads were recovered from the surface, from screened excavation units, and from features processed by flotation techniques.

While this collection of beads is quite small, it is of importance since it is one of the few reported assemblages of eighteenth century beads from a Black plantation slave context. Generally, the beads are fairly typical of those traded to North American Indians. Following a brief discussion of bead manufacturing techniques and bead typology, the beads will be classified according to a descriptive typology. The beads will then be compared to those found on Indian sites in North America and a slave cemetery in Barbados.

Manufacture of Glass Beads

Two major manufacturing processes were in use during the eighteenth century: the hollow cane technique and the mandrel wound technique. In the hollow cane technique, a large bubble of glass is drawn out into a long tube, or "cane", which is then cut into short sections for beads. Frequently, such cane beads were then tumbled over heat with a polishing agent to round and smooth the beads, and are, therefore, known as tumbled cane beads. Mandrel wound beads are produced by winding a molten thread of glass around a spinning rod, or mandrel, until a suitable sized bead is built up. These beads can be further modified by pressing facets on the beads while they are still hot and plastic. See Good (1972) and Kidd (1979) for further discussion of bead manufacturing techniques.

Bead Typology

After beads are classified according to their manufacturing technique, they are further classified according to their structure. Simple beads are composed of one layer of glass, compound beads are composed of two or more layers of glass, and complex beads have applique or inset decorative elements. Beads which are both compound and complex, that is those beads which are composed of two or more concentric layers of glass with inset decorative elements, are classified as composite (Stone 1974).

Finally, beads are classified according to their colors. Since a standard color chart was not available to this author, color descriptions are general. Specific proveniences of all beads are listed in Table F-1.

Bead Types

Drawn Cane Beads

Type 1. Tubular translucent blue untumbled cane bead of simple construction. One complete and one fragmentary specimen. Diameter: 7-8mm, Length: 24mm (Figure F-1).

Type 2. Tubular translucent green tumbled cane seed bead of simple construction. Three specimens. Diameter: 3mm, Length: 2mm (Figure F-1).

Type 3. Tubular translucent navy blue tumbled cane necklace bead of simple construction. One specimen. Diameter: 7.5 mm, Length: 6mm (Figure F-1).

Type 4. Barrel shaped opaque turquoise blue tumbled cane necklace bead of simple construction. One specimen. Diameter: 8 mm, Length: 10.5 mm (Figure F-1).

Type 5. Barrel shaped brick red tumbled cane necklace bead of compound construction. The bead consists of three layers: a thin clear layer, a thin brick red layer, and a translucent green core. Two specimens. Commonly referred to as a Cornaline d'Aleppo. Diameter: 7-8.5 mm, Length: 8.5-9 mm (Figure F-1).

Type 6. Tubular tumbled Cornaline d'Aleppo. Shape variant of Type 5. One specimen. Diameter: 5 mm, Length: 14.5 mm (Figure F-1).

Type 7. Cornaline d'Aleppo donut shaped seed bead. Size variant of Type 5. One specimen. Diameter: 3 mm, Length: 2 mm (Figure F-1).

Type 8. Opaque white tumbled "pony" size cane bead of compound construction. The white bead has a clear glass overlay to add gloss. One specimen. Diameter: 4 mm, Length: 2.5 mm (Figure F-1).

Type 9. Striped cane bead of untumbled composite construction. An off white core layer is covered by a thin layer of opaque white which has six brick red stripes made up of minute multiple canes which show as individual canes in some areas. The whole bead is covered with clear glass for gloss. One specimen. Diameter: 6.5 mm, Length: 20 mm (Figure F-1).

Wire Wound Beads

Type 10. Clear barrel shaped wire wound bead of simple construction. Two specimens. Diameter: 11 mm, Length: 8-8.5 mm (Figure F-1).

Type 11. Clear donut shaped wire wound bead of simple construction. One specimen. Diameter: 11 mm, Length: 6 mm (Figure F-1).

Type 12. Opaque white olive shaped wire wound bead of simple construction. Often called a "barley corn bead". One specimen. Diameter: 4 mm, Length: 7 mm (Figure F-1).

Type 13. Fragment of a large translucent blue wire wound bead of simple construction. This bead was probably originally olive shaped. One fragmentary specimen. No size recorded. (Figure F-1).

Type 14. Translucent blue "drop" or barrel shaped wire wound bead of simple construction. One complete and two fragmentary specimens. Diameter: 9.5 mm, Length: 10 mm (Figure F-1).

Type 15. Opaque turquoise blue spherical wire wound bead of simple construction. One specimen. Diameter: 4 mm, Length: 4 mm (Figure F-1).

Type 16. Translucent blue tubular wire wound bead of simple construction. The bead has been marvered into a pentagonal cross section while plastic. One specimen. Diameter: 11 mm, Length: 11 mm (Figure F-1).

Type 17. Translucent blue bead of simple, wire wound construction, with eight pressed facets and two unmodified ends. Commonly called a decahydral bead. One fragmentary specimen. Diameter: 10 mm, Length: 8 mm (Figure F-1).

Type 18. Opaque Turquoise blue "funnel-shaped" wire wound bead of simple construction. One fragmentary specimen. Diameter: 4 mm, Length 6+ mm (Figure F-1).

Comparative Analysis

Table II presents a comparative analysis of the Cooper River project beads. Comparisons are made with the Newton Cemetery, a slave cemetery in Barbados ca. 1660-1775 (Handler and Lange 1978); the Guebert site, a Kaskaskia Indian site in Illinois 1719-1833 (Good 1972); Fort Moore, South Carolina, 1680-1763 (Storey n.d.; Polhemus 1971); and a sequence of trade beads established from Wichita Indian sites in Texas for the period 1700-1850 (Harris and Harris 1967). Many other Indian sites from the eighteenth century could have been utilized for comparative purposes, but the ones chosen cover a wide geographical range and have well described samples of beads.

It is clear that the assemblage of beads from the Cooper River Plantation sites dates to the eighteenth century. Virtually all of the beads have been found on eighteenth century Indian sites. Furthermore, the faceted beads typical of nineteenth century Black slave and Indian sites (Ascher and Fairbanks 1971; Fairbanks 1974; Good 1976) were not found. Most of the beads could easily be attributed to the early to mid-eighteenth century, although Harris and Harris (1967) indicate that virtually all of the types were common well into the nineteenth century. Only Type 12, the barleycorn bead, appears to date from the late eighteenth century; after 1767 according to Harris and Harris (1967). Interestingly enough, this bead was found inside the hole of a Type 10 bead.

Type 15 and Type 18 may well date to the nineteenth century. A red counterpart to Type 18 has been found on Creek Indian sites (post 1836) in Oklahoma (Mary Elizabeth Good, personal communication). The wire wound bead Type 11 has also been found in nineteenth century slave contexts at the Hermitage (Good 1976:Type R). Nonetheless, the assemblage as a whole is most typical of the mid-eighteenth century. Mary Elizabeth Good was kind enough to study a slide of the beads, and she concurs that it is a mid-eighteenth century assemblage (Good, personal communication).

One tentative observation can be proposed. Certainly in the Cooper River project, seed beads were quite rare, although features were processed by fine flotation recovery techniques. Seed beads were also rare at the Hermitage (Good 1976) and were not recovered from the Rayfield Plantation (Ascher and Fairbanks 1971), although these latter sites both date from the nineteenth century. Apparently southern plantation slaves did not have time for bead embroidery, or they simply did not have access to the small beads. Just as clearly, bead necklaces were an important item of personal adornment. Unfortunately, little is known of the slave's means of access to the beads. It is doubtful that they were bartered from Indians, since many of the sites known archaeologically were in areas largely depopulated by Native Americans. Perhaps beads were distributed as bonuses to hard working slaves. A thorough search of relevant historical materials might shed light on this problem.

In conclusion, the collection of beads from the Cooper River project is important since it is the only sample of eighteenth century beads from a southern Black slave context. Larger samples of beads would be desirable, but it appears that bead necklaces were an important article of personal adornment, while articles of clothing embroidered with seed beads were not.

Table F-1. Provenience of Beads

Type	Catalogue Number
1.	76B-U31-1; 245-L17-5
2.	76D-F18; 76I-0-5; 76-F8-1
3.	76-F8-1
4.	76-0-0
5.	76-L10-5; 76B-U30-1
6.	76-L10-0
7.	76B-F102
8.	76B-F88-3
9.	76-L10-0
10.	76-F2-4; 76A-U18-2
11.	76-0-0
12.	76-F2-4
13.	76A-U22-1
14.	76-L9-5; 76B-F102; 76B-U30-1
15.	245-1-0
16.	76B-U27-1
17.	75B-F29-5
18.	245-F62-1

Table F-2. Comparative Analysis Table

Cooper River Project Type No.	Guebert	Fort Moore, S.C.	Newton Cemetery	Wichita Sequence #/Date
1	122	22 or 199	--	--
2	--		26v	
3	59	78 or 219		164/1740-1820
4	90a	77		10/1700-1836
5	127	9		99/1740-1836
6	123	8 variant		57/1740-1820
7	127a	8	26y	51/1700-1836
8	107a	6		45/1700-1836
9	--	193		
10	49	Probable	26o	--
11	43	162	26q	93/No Date
12	39			101/1767-
13	--	244 or 360		
14	46	?		--
15	--			
16	1	occurs in white		--
17	7	66	26k	41/1700-1820
18	--			

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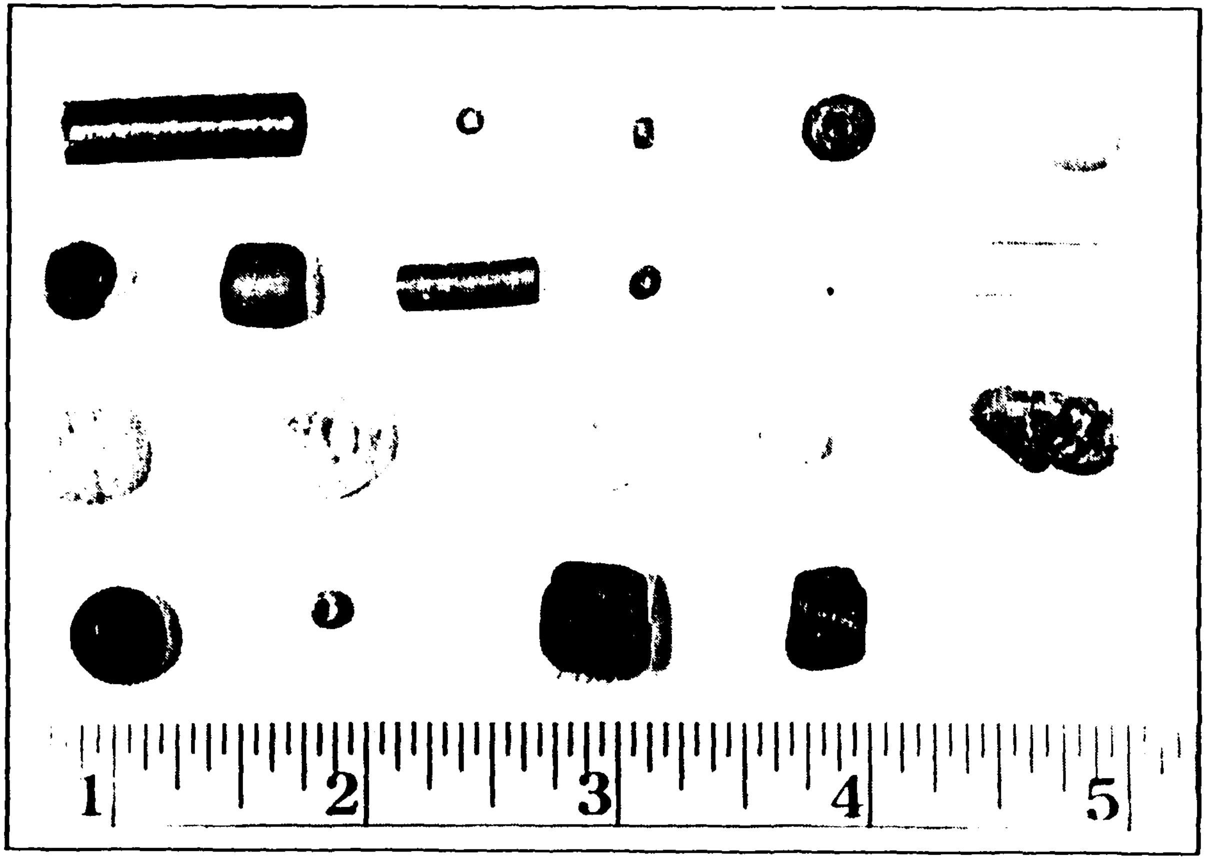

TOP ROW (LEFT TO RIGHT) - TYPES 1, 2, 2, 3, 4
SECOND ROW - TYPES 5, 5, 6, 7, 8, 9
THIRD ROW - TYPES 10, 10, 11, 12, 13
BOTTOM ROW - TYPES 14, 15, 16, 17, 18

FIGURE F-1
Beads

APPENDIX G

ETHNOBOTANICAL REPORT

PAUL GARDNER

THE ANALYSIS AND INTERPRETATION OF PLANT REMAINS FROM THE YAUGHAN AND CURRIBOO PLANTATIONS, BERKELEY COUNTY, SOUTH CAROLINA

by

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September, 1980

In 1979, in order to mitigate the destruction of historic antebellum plantations by the construction of a canal between the Santee and Cooper Rivers near Saint Stephens, South Carolina, archaeological excavations were undertaken by Soil Systems Incorporated under the auspices of the Interagency Archeological Service. A description of the overall excavation procedures used at the Yaughan Plantation (38BK75 and 38BK76) and at the Curriboo Plantation (38BK245) have been presented elsewhere and need not be repeated here. What is of concern to this study is the fact that the excavators made use of soil flotation to obtain plant remains preserved in the archaeological deposits. While the use of flotation procedures is becoming increasingly common on excavations of prehistoric archaeological sites, they have been slow to be accepted by historic sites archaeologists. This is unfortunate, as soil flotation can be productively carried out using a minimum of simple and inexpensive equipment.

While mechanical froth flotation devices are best for dealing with large quantities of soil, much simpler equipment can be used on most sites with fruitful results. The simplest arrangement, known as the "bucket method", involves half filling a bucket with water, slowly pouring in a measured amount of soil, and agitating gently to free the charcoal which then is carried to the surface of the water. Then the water is carefully poured through a screen which catches the charcoal particles. Pouring should cease before the heavy residue in the bottom of the bucket enters the screen. Additional water can then be added to the bucket and the procedure repeated, until no further charcoal is freed from the soil. At this point, the remaining heavy residue can be water screened to retrieve other small remains.

Another simple arrangement is known as the "immersion method". Here a measured amount of soil is added to a bucket whose bottom has been replaced with a mesh screen. The bucket is half immersed into a larger tub of water (or a stream, river, etc.) and agitated. The charcoal which floats to the surface of the bucket is skimmed off with a tea strainer. A variant of this method was used at the Yaughan and Curriboo Plantations, but here a 55 gallon drum was halved and window screen stretched across it. Water was then added to the drum to cover the screen, and soil was then poured directly onto the screen and stirred. The charcoal thus freed was then skimmed off with a tea strainer.

Regardless of which flotation techniques are used, a few simple guidelines should be adhered to in order to simplify analysis and to insure comparability of results from one site to the next. First, the charcoal retrieved by flotation should be allowed to dry slowly in order to mitigate breakage. This can best be accomplished by emptying the charcoal onto several thicknesses of absorbent paper towels (a spray bottle of water works well in removing any adherent charcoal from the screen), and then enclosing this in a sheet of newspaper. This package can be labeled with waterproof ink and then placed outside of direct sunlight to dry. Second, the mesh size of the screen used in flotation should be recorded. Window screen has a mesh size of about 1.3 millimeters, and tea strainers have a mesh size of about 0.7 millimeters to 1.0 millimeters. Better than either of these, however, are geologic sieve screens, which are more durable and have a more uniform mesh.

A mesh size of 0.5 millimeter to 0.7 millimeter is most suitable. Finally, the volume of each soil sample floated should be recorded. This allows the computation of standardized measures of the abundance of plant remains (grams of remains/liter and seeds/liter) which can be used for intersite comparisons.[1] It is convenient to use a standardized measure -- two to four liters generally works well with the non-mechanical devices, but the ideal volume will vary with soil conditions. (For a more detailed discussion of flotation devices and techniques, see Watson, 1976).

Analytic Procedures

The ethnobotanical analysis followed the standard procedures of the Research Laboratories of Anthropology, developed by Richard A. Yarnell (cf Yarnell 1974). Briefly, these procedures are as follows. Each sample to be analyzed is weighed, then fractioned through a series of stacked geologic screens. This screening produces a set of subsamples, each composed of approximately equal sized particles which are more easily examined than the unsorted material. Each subsample is weighed, then examined under a variable power (7x to 30x) dissecting microscrope. All seeds are removed from each subsample and identified, to the most limited taxonomic level possible, usually genus. As the weight of the seeds is usually quite small, all seeds from a sample are combined and their aggregate weight reported. In addition, the counts of each seed type are reported.

Identification of other plant remains is carried out for those remains greater than 2.0 millimeters in size, and the weight of each category of material is taken. Unfortunately, remains smaller than 2.0 millimeters in size cannot be confidently identified. However, in order that the quantities of material reported might more accurately reflect the composition of the sample as a whole, the weights of the remains larger than 2.0 millimeters are extrapolated to the remains that are between 2.0 millimeters and 0.7 millimeter in size. This extrapolation cannot be extended to the material smaller than 0.7 millimeter since this material is primarily fine dirt particles and rootlets with a disporportionately small amount of carbonized plant remains; therefore the weight of the non-seed material passing through the 0.7 millimeter screen is ignored and not entered into the tables.

Flotation of the Yaughan and Curriboo Plantation feature fill was so successful in obtaining plant remains that it was not feasible, for reasons of time and budget, to examine every sample -- the quantity of material was simply too great. It was therefore necessary to reduce the amount of material to be analyzed while still maintaining a data base sufficient to allow inferences to be drawn to the site as a whole. This was accomplished in the following manner. First, a preliminary examination of the samples showed that the posthole and postmold samples contained little information. These samples were usually quite small -- the fifty-two such samples from Curriboo Plantation had a median weight of only 0.96 gram -- and were almost without exception

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[1]These data were not recorded for the Yaughan and Curriboo Plantations; therefore, these statistics have not been calculated in this report.

quite trashy, containing more rootlets and dirt than carbonized material. Hence the postmold and posthole material was not analyzed except for four samples from the Yaughan Plantation. Likewise, the samples from other non-pit features were slighted for the same reasons. On the other hand, the samples from trash pits were generally large and, compared to other samples, relatively clean of non-carbonized remains. In addition they are the type of feature most likely to contain carbonized plant remains. For these reasons it was decided to focus the analysis on this class of feature. Unfortunately, it was not possible to analyze even the entirety of the feature material. Instead, for the particularly large features, the samples from one-half or one-fourth of the feature would be analyzed. In this fashion it was possible to analyze at least a portion of the material from each trash pit from the three sites. While a greater quantity of analyzed material and a broader range of proveniences would, of course, be desirable, it is felt that the results obtained by the above sampling procedures are sufficient to characterize the plant-human relationships at the Yaughan and Curriboo Plantations.

The Nature of the Evidence

Before discussing what plant remains were recovered from the two plantations, it is necessary to consider the factors involved in preserving plant remains in the archaeological record. Like all organic material, plant remains are readily devoured by a host of organisms which inhabit the soil or scavenge its surface. Unless special conditions deter these organisms, plant remains are quickly removed from the archaeological record. In certain restricted localities such as dry-caves, permanently wet or frigidly cold sites, environmental conditions are sufficiently extreme as to preclude the existence of the destructive organisms. In such localities as these, plant remains have an excellent chance for preservation. Unfortunately, archaeological sites are infrequently located in such "protected" environments, and the typical open site such as the Yaughan or Curriboo Plantation can be expected to support a full array of decay-producing organisms. Fortunately for the archaeologist, plant material which is carbonized is made immune to such decay while generally retaining sufficient structure to be identifiable microscopically, provided the material is not mechanically destroyed.

Because open sites preserve only carbonized plant remains, a knowledge of the likelihood of various plants being carbonized is of critical importance in interpreting the archaeological record. It should be noted that exposure to fire is not, by itself, sufficient to insure preservation by carbonization; rather, those remains which are burned in the presence of oxygen are quickly transformed into a fine, structureless ash. It is only those remains which are exposed to high heat in a reducing (oxygen deprived) atmosphere that are preserved with intact structure. Fortunately, the combination of high heat and a reducing atmosphere is found near the interior of most fires, particularly beneath the ash layer which accumulates as the fuel is consumed. It is from such areas as these that plant remains enter the archaeological record of open sites.

Obviously, not all plant materials utilized by a site's inhabitants are equally likely to be preserved by carbonization. Those plant parts deliberately added to the fire as fuel are the most likely to be preserved. Although such items as corncobs and nutshells may have been used as fuel when they were abundant, wood is the most commonly utilized plant fuel and is almost always the largest component of any flotation sample. At the opposite extreme, plants used exclusively in areas distant from fires will usually be absent from the archaeological record. For this reason, certain plant foods, for example berries or small fruit, which may have been eaten fairly frequently as snacks in the localities where they grew, but infrequently transported back to the fireside, are probably under-represented in the archaeological record.

It is probably safe to assume, however, that until recently most important plant foods were either prepared or consumed in proximity to a fire. Any inedible portion of a plant food, such as a nutshell or a peach pit, may very well have been disposed of in a nearby fire, and small seeds were probably frequently lost into the flames during food preparation. These items have an excellent chance of being recovered archaeologically.

The proximity to fire in which a plant is utilized is not the only factor which affects the probability of a plant's being recovered archaeologically. Dense plant structures like seeds are more likely to be preserved in a recognizable form. Succulent plant parts such as leaves or tubers are much less likely to be preserved. Hence, evidence of the utilization of plants for greens or tubers is difficult to acquire, particularly if, like tobacco or indigo, the plant is intentionally harvested before it fruits, thus precluding the fortuitous carbonization of their seeds. Weedy annuals, however, which thrive in areas disturbed by human activity, produce a myriad of seeds which are often carbonized when they are dispersed into an open fire or when the weedy area is intentionally burned to clear it.

Finally, the way in which a plant is processed may greatly affect the probability of its being preserved. The parching of seeds over an open fire is highly likely to result in some seeds entering the fire where they may be carbonized fairly intact. On the other hand, the grinding of seeds to produce flour or meal may lessen the chance of any spilled portion's avoiding combustion and certainly decreases the possibility of correctly identifying the seeds.

Analysis and Interpretation

During the course of analysis, 726 grams of material were examined from 60 provenience units. Overall the samples were rather trashy, containing a total of 135 grams of material other than carbonized plant remains. This was primarily rootlets and pieces of soil, but included an occasional uncarbonized seed or wood fragment. As the antiquity of uncarbonized remains cannot be demonstrated, all such remains are entered under the category "trash" and are not included in the other categories, which tally only carbonized material. The carbonized material included 566 grams of wood and pitch, 2.5 grams of maize cupules, 0.8 gram of walnut shell, 1.0 gram of hickory nutshell, 10.5 grams of peach pits, 1.5 grams of small seeds, and 7.8 grams of unidentified fragments, a category which includes a mixture of rather amorphous pieces, some of which are probably galls, fungus or bark.

The majority of the carbonized plant remains recovered from the Yaughan and Curriboo Plantations represent plants used as fuel. This includes the wood and pitch[2] and the maize cupules. Wood occurred in all of the features analyzed, and while no rigorous attempt at species identification was undertaken, it can be said with confidence that the overwhelming majority of wood fragments were pine, with hardwood fragments being extremely rare. Maize cupules, small cup-like structures on the cob, from whence the kernels originate, were present in 25 of the 51 flotation samples and indicate the use of corncobs as fuel.

The presence of maize cupules also strongly suggests the use of maize as a foodstuff, and this is further indicated by the occurrence of maize kernels in four of the samples. This is a surprisingly low number, considering the well established role of maize in prehistoric and historic period diets in the southern United States. Of course, the possibility that maize was not an important dietary item of the Curriboo and Yaughan Plantation slaves cannot be ruled out absolutely, but the large number of cupules in the samples and the regularity with which maize is mentioned as a staple food of slaves from mid-nineteenth century South Carolina plantations (cf Rawick 1972:14, 26, 39, 52, 55, 62, 99, 119, and other passages) makes this, in my opinion, an implausible situation. Rather, the small number of maize kernels may be the result of highly effective milling which has militated against preservation. Rice (Oryza sativa L.) appears to have been an important foodstuff, 19 grams of which occur in 12 samples. In the eighteenth century rice was an important cash crop in South Carolina, ranking along with indigo as one of the two most important sources of wealth during the period 1750 to 1776 (Wallace 1966:188). The desirability of inundating rice fields restricted its cultivation to river bottoms, and the difficulty of transporting it overland due to its high weight-to-volume ratio made its production near navigable waterways even more attractive (Wallace 1966:189). The Curriboo and Yaughan Plantations would thus seem to have been well located for its cultivation. Rice is frequently mentioned as an article in the diet of South Carolina slaves (Otto 1977:103; Rawick 1972:55, 100).

The one other cultigen which was definitely identified was the peach (Prunus persica), like rice a native of Asia. Twelve peach pits from nine samples were recovered, but this probably does not accurately reflect its true dietary significance. Instead of rivalling rice or maize as a foodstuff, as its frequency of occurrence might suggest, peaches were likely little more than a dietary complement available only during a limited harvest season of June to July (cf Schopmeyer 1974:664). Its relative abundance in archaeological sites is largely due to the density of the pit, which makes it quite durable, and to its large size which makes it quite noticeable to excavators.

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[2]"Pitch" is to be understood as a generic term for any resinous substance exuded by wood as it burns, and does not refer to a deliberately manufactured naval store.

One other plant remain may derive from a cultigen. Feature 65 for the Curriboo Plantation contained a carbonized plant part, roughly discoidal with a diameter of 18 millimeters and a thickness of 9 millimeters. This most closely resembles a section of the peduncle (fruit stalk) of one of the Cucurbitaceae, but this identification is far from certain.

The walnut and hickory nutshell seem to represent snack foods rather than dietary staples. Walnut occurred in only seven samples, and hickory in only ten. Furthermore, they were not a large component of any flotation sample but occurred in small quantities; in fact, their total combined weight of 1.78 grams comprises only 0.3 percent of the total carbonized plant remains recovered. This, along with the total absence of acorns from the samples, seems to indicate a very limited exploitation of nuts by the site inhabitants.

The hawthorn (Crataegus sp) and bramble (Rubus sp) seeds would also seem to represent dietary complements, as both were represented by only one seed apiece. The fruit of the hawthorn is a small pome with large seeds and a small amount of pulp (Fernald and Kinsey 1958). It is therefore a food of limited appeal, although John Lawson in 1709 described the haws of North Carolina as having " . . . a very pleasant agreeable Taste" (Lawson 1967:112). Bramble (a general term for the genus which includes blackberries, raspberries, and dewberries) can be quite abundant in localized areas and can produce a profusion of fruits during its midsummer fruiting season. The sole seed of Sumac (Rhus sp) may represent a dietary item, as the seeds can be used to produce a pleasantly acidic beverage (Fernald and Kinsey 1958). It is equally possible, however, that the seed may have derived from a nearby plant that had colonized the disturbed habitats created by human activities.

The other plants which were identified from the samples are unlikely to have been of economic importance, but rather are weedy species which thrive in disturbed habitats such as those surrounding human habitations. The 13 legume seeds seem to fit into this category rather than being domesticated beans. The legume from 75F2 may be rattlebox (Crotalapia sp.), but it is too distorted to be confidently identified; and the five legumes from 76BF82 may possibly be Strophostyles sp., but the identification is far from certain. Two other "weedy" genera, Rumex and Acalypha, are represented by one seed each; and four seeds are possibly Euphoriba collata. These plants invade disturbed habitats, so their presence around plantation slave quarters is hardly remarkable.

The Polygonum seed, 1.6 millimeters long, and trigonous with concave sides, is probably Polygonum hydropiperoides. This species inhabits swamp forests, streams, and dicthes (Radford, Ahles, and Bell 1968). So its presence in a canal is understandable. How it became carbonized is more problematic, but is an indication of fires located outside of the domestic structures. Fires may have been used to clear areas of weedy growth, or the seed may have been dispersed into a fire used for some other outdoor activity such as boiling laundry, making soap, or burning rubbish.

Several grass seeds were also found in the samples. Of special interest are the three carbonized seeds of goosegrass (Eleusine indica L.). Goosegrass is a common grass in the Carolinas today (Radford, Ahles and Bell 1968:116), but is a native of Asia (Martin 1972:19). The three seeds found in the early nineteenth century Yaughan Plantation samples are the earliest evidence of its occurrence in the New World of which I know.

The "unidentified type one" is the most numerous grass seed found, and the most troubling. It is roughly cylindrical with a beveled end and a shallow groove along one side. Its classification as a grass seed is somewhat questionable, resting on the interpretation of the beveled end as a basal embryo area. However, the bevel and the shallow groove are on the same side of the seed, an arrangement not found on any grass with which I am familiar. Furthermore, the seeds are highly variable in size, ranging from 2.3 millimeters to 4.2 millimeters long. It is possible that this seed type is not a grass, and may, in fact, not be a seed.

The other "unidentified grasses" category includes one seed of either Setaria or Paspalum from 245K4-1. Identification cannot be more certain, since the seed is both distorted and eroded. The other four seeds in this category are fragmentary remains of small grass seeds such as Panicum or Digitaria. Like the other weedy plants identified, the grasses are likely to have been colonizers of disrupted areas of the plantations, and whose seeds were most likely carbonized fortuitously rather than as a result of any human utilization of them.

The number of unidentified seeds is quite large compared to Amerind sites. These seeds are typically minute and fragmentary and are, for the most part, "unidentifiable" as opposed to merely "unidentified". No one type (other than the "unidentified grass type 1") occurs with any apparent regularity or in significant numbers in any one feature. This suggests that the seeds are derived from local weeds rather than from economic plants, since seeds utilized to any great extent generally occur both frequently and in concentration. This, at least, is true of Amerind sites.

Conclusions

Probably the most general conclusion that can be drawn from this study is that paleoethnobotanical analysis can be fruitfully allied with historic sites archaeology. The archaeological record of the Yaughan and Curriboo Plantations was demonstrated to hold a significant amount of carbonized plant material which could be collected with an inexpensive and uncomplicated flotation apparatus, and the analysis of the material has added to our knowledge of the plant-human relationships existing on an antebellum plantation.

It might be expected that a study of plant usages on an antebellum plantation might be most fruitfully studied through an analysis of archival records. While such records are an important source of information and should not be ignored, it is generally the case that archival records and the archaeological records complement each other. Archival records deal primarily with the plantations' cash crops, the plants which obviously necessitate the most record-keeping. For information concerning such crops as indigo, cotton or tobacco, archival records can be quite informative.

On the other hand, a paleoethnobotanical study such as this one has much less chance of gaining information concerning cash crops. This is hardly surprising, however, as excavations centered on domestic areas are not likely to encounter evidence of the processing, storage or transporting of cash crops, as these activities were probably carried on in areas of the plantation removed from the domestic structures. An expansion of the excavations to include other areas of the plantations may detect archaeological evidence for particular cash crops, but more likely in the form of structures associated with their storage or processing than in remains of the plants themselves. For example, the extraction of the blue pigment from indigo (*Indigofer tinctoria*) requires a three-tiered system of brick and mortar vats in which the plants are boiled, fermented, and macerated (Crokatt 1746; 1747). The vats are more likely to be recognizable than the plant itself, which is described as "looking like dung" (Crokatt 1746) after treatment is completed. While the extraction of pigments is perhaps the most extreme deformation to which any plant is subjected during processing, the production of fibers or oil is probably nearly as thorough in guaranteeing that a plant is rarely identified archaeologically. When one takes into account the rigors of processing, the spatially distinct areas associated with their processing and storage, and the small likelihood of their being carbonized except through rare conflagrations, it is hardly surprising that no cash crops, except possibly rice, were identified in this study.

Paleoethnobotany can, however, provide much evidence about the plant foods used by a site's inhabitants. Archival evidence is inferior in this regard, since plants used for subsistence purposes generally invoke much less record-keeping, particularly if the plants are grown on the same plantation on which they are consumed, and of course, the utilization of wild plants would escape record-keeping entirely.

It is in gaining information concerning the subsistence practices of the Yaughan and Curriboo Plantation slaves that this study has been most successful. Otto (1980:9-10) found that at Cannon's Point Plantation, St. Simons Island, Georgia, the slaves augmented their diet to a great extent by the hunting of wild animals; thus one might expect wild plants to have played an important role in the diet of the Yaughan and Curriboo Plantation slaves. This, however, does not appear to have been the case. Cultivated plants seem to have provided the overwhelming portion of the plant food eaten by the slaves, with wild plants providing only occasional dietary complements.

Also, the range of plants utilized for food is quite small, with only seven, possibly eight, plants being utilized, and with only maize and rice seeming to be of any great importance.

This orientation toward the exploitation of only a few plants is in sharp contrast to the pattern of exploitation of most Amerind sites. For example, at an early eighteenth century Saura village in Piedmont North Carolina, Wilson (1979) found evidence of the use of at least 19 food plants, with wild species, particularly hickory nuts, making a significant contribution to the diet.

The reasons for the highly focal adaptation of the plantation slaves can only be speculated upon. It is, of course, possible that the paucity of wild plants is more apparent than real. The slaves may well have exploited wild greens such as pokeweed (Phytolacca americana) or goosefoot (Chenopodium spp) which have not been preserved, but it is also quite possible that they grew cultivated greens such as turnip or mustard (Brassica spp). It may have been the case that wild plants were of little importance due to the adequacy of the cultigen-derived diet which gave no motivation to gather wild foods. On the other hand, the lack of wild plant utilization may reflect the particular social status of the slaves. Effective exploitation of wild plants requires considerable mobility in order to visit the often dispersed locations where the plants occur, and considerable freedom to schedule activities so that one can gather the wild plants during their usually restricted harvest period. Slaves may not have possessed the necessary freedom of action to pursue successfully a subsistence strategy based on foraging.

The overall adequacy of the slaves' diet is difficult to assess. The primacy of corn and rice as foodstuffs suggests a diet heavy in carbohydrates and low in other nutrients; but this conclusion must be tempered by the knowledge that other foods were probably eaten but not preserved. The most satisfactory method of assessing the adequacy of the slaves' diet would be to compare the plant remains from the slave quarters to those from the residence and kitchen of the plantation masters, with the degree to which the former matches the latter providing a rough measure of the adequacy of the slaves' diet (assuming, of course, that the masters did not suffer from chronic malnutrition). This comparison would be particularly useful in clarifying the reasons behind the absence from the slave quarter plant remains of several food plants -- for example, watermelons, grapes, and apples -- which should have been present on an antebellum plantation, and which should have been preserved if they were heavily utilized. I am tempted to speculate at this stage of the research that the slaves' diet was constricted, not to the point of chronic malnutrition, but rather to that of culinary monotony. This arrangement would provide the plantation owners with a healthy work force while preserving their monopoly over the plantations' choicest resources.

It is with speculations rather than firm conclusions that this study must close. The plantation community is too complex and the study undertaken too narrow to allow more definitive results. It would be desirable to see larger areas of plantations excavated and more plant remains obtained and analyzed. Information on the diet of the other social classes inhabitating the plantations could be gathered, and perhaps information can be gleaned on plant usages other than dietary ones. Overall, much work remains to be done. Both historic sites archaeology and paleoethnobotany are young disciplines; an alliance between the two holds much promise for the future.

Abbreviations Used in Tables G 1-6

B = Cellar

C = Canal

F = Floor

H = Hearth

K = Brick kiln

L = Lithic scatter

M = Posthole/mold

P = Pit

T = Trench

U = Excavation unit

+ = Trace (less than 0.05 g)

Table G-1. Yaughan Plantation (38BK75): Plant Remains by Weight (g)

Provenience	Feature Type	Portion of Sample Analyzed (by weight)	Weight of Analyzed Portion	Trash	Unidentifiable Fragments	Wood and Pitch	Maize Cupules	Walnut Shell	Hickory Shell	Peach Pits	Small Seeds
F1	L	1.00	.75	.75							
F2	P	1.00	13.93	.11	.06	13.16	.02			.53	.05
F5	P	.81	23.37	1.82	.49	20.79	.05	.01		.13	.08
F6	M	1.00	1.20	.44		.76					
F7	M	1.00	.34	.13		.21					
F8	M	1.00	1.25	.72		.53					
F9	M	1.00	3.79	.92	.08	2.78					+
F22	P	.68	18.30	2.25	.06	12.34	.02	.02		3.55	.06
F25	?	1.00	26.43	2.11	.04	24.28					+
F26	?	1.00	.93	.11	.03	.79					
F27	P	1.00	32.17	5.14	.31	22.51	.13	.45	.08	3.44	.11
F29	P	.28	34.74	1.92	.21	31.52	.02		.11	.58	.38
F30	P	1.00	23.65	.16	.31	23.09	.08				.01
F31	P	.29	10.01	1.30	.16	8.53					.02
F32	P	1.00	1.05	.26	.02	.77					+
F33	T	1.00	75.35	27.05	.23	47.65	.02		.35		.05
TF2	?	1.00	5.68	.06	.02	5.57					.03
U1	U	1.00	.64							.64	
U16	U	1.00	.72	.72							
U26	U	1.00	.76	.76							
U33	U	1.00	.97			.79			.18		
U34	U	1.00	1.45			.49				.96	
U42	U	1.00	.11	.11							
U43	U	1.00	.14	.14							
TOTALS			277.73	46.98	2.02	216.56	0.34	0.48	0.72	9.33	0.79

Table G-2. Vaughan Plantation (38BK75): Seeds

Provenience	Rice	Maize	Peach	Hawthorn	Bramble	Sumac	Legumes	Goosegrass	Unidentified Grass: Type 1	Other Grasses	*Rumex*	*Polygonum*	*Acalypha*	Unidentified	TOTAL
F1															
F2			1	1			1			1				5	9
F5	1		1						2					2	6
F6															
F7															
F8															
F9														3	3
F22			2											2	4
F25									1						1
F26															
F27	1		2					1	1					9	14
F29			2					1						6	9
F30							1							3	4
F31									3					4	7
F32									2					2	4
F33	2	1				1	3	1	1					5	14
F2							1		2						3
U1			1												1
U16															
U26															
U33															
U34			1												1
U42															
U43															
TOTALS	4	1	10	1		1	6	3	12	1				41	80

Table G-3. Yaughan Plantation (38BK75):
Plant Remains by Weight (g)

Provenience	Feature Type	Portion of Sample Analyzed (by weight)	Weight of Analyzed Portion	Trash	Unidentifiable Fragments	Wood and Pitch	Maize Cupules	Walnut Shell	Hickory Nut Shell	Peach Pits	Small Seeds
F1	P	1.00	1.12	.44	-	.62			.06		+
F2	P	.63	44.07	4.90	.40	38.48	.15	.09			.05
F3	P	1.00	2.28	1.08	.50	.70					+
F4	P	1.00	.58	.48		.09					.01
F5	P	.51	6.94	.34	.02	6.58					
F7	P	1.00	3.87	.19	.02	3.63			.03		
F8	P	.71	48.26	19.44	.28	27.78	.05	.10	.10	.49	.02
F9	P	1.00	10.08	.26	.07	9.65	.09				.01
F10	P	1.00	2.59	.52	.05	2.00	.02				+
F11	P	1.00	21.48	4.66	.19	16.40	.24				+
F12	P	1.00	15.18	4.32	.14	10.27	.43				.02
F13	P	1.00	5.33	2.15	.02	3.03	.12				
F14	P	1.00	5.57	2.31	.02	3.20	.02				.02
F15	P	1.00	12.16	1.07	.13	10.31	.03	.06			.06
F16	T	1.00	1.69	.03	.12	1.54					
F32	H	.41	31.57	.57	.33	30.26	.16		.02		.23
F38	T	1.00	2.33	.11	.02	2.13	.07				
F106	P	1.00	.09			.09					
TOTAL			215.19	42.87	2.31	157.26	1.38	0.25	0.21	0.49	0.42

Table G-4. Yaughan Plantation (38BK76): Seeds

Provenience	Rice	Maize	Peach	Hawthorn	Bramble	Sumac	Legumes	Goosegrass	Unidentified Grass: Type 1	Other Grasses	*Rumex*	*Polygonum*	*Acalypha*	Unidentified	TOTAL	Comments
F1														1	1	
F2	2						1							2	5	
F3									3					1	4	
F4									1					1	2	
F5																
F7																
F8	1		1						1				1	2	6	
F9	1								1					1	3	
F10	1									1				2	4	
F11														2	2	
F12														1*	1	*cherry?
F13																
F14							1		1					3	5	
F15	3													5	8	†6 grass rachi
F16																
F82	2	1					5		37					28	73	
F88																
F106																
TOTAL	10	1	1				7		44	1			1	49	114	

TABLE G-5. Curriboo Plantation (38BK245): Plant Remains by Weight

Provenience	Feature Type	Portion of Samples Analyzed (by weight)	Weight of Analyzed Portion	Trash	Unidentifiable Fragments	Wood and Pitch	Maize Cupules	Walnut Shell	Hickory Shell	Peach Pits	Small Seeds	Other
F1	P	.45	11.51	.03	.13	11.37	.01					
F2	P	.45	23.02	.30	.15	22.05	.02				+	
F9	C	1.00	9.49	.32	.17	8.76	.05			.19	+	
F12	P	.33	56.06	.36	.58	54.37	.56	.07			.12	
F50	P	1.00	1.95	.09	.04	1.78			.01		.03	
F61	P	1.00	1.71	.03	.01	1.67					+	
F62	P	1.00	12.33	.12	.19	11.96	.02		.04		+	
F63	P	.18	9.05	.77	.11	8.13	.02				.02	
F65	P	1.00	12.19		.21	11.32	.11				.01	+0.54 g peduncle?
A1-2	B	1.00	4.85	4.22		.63						+0.01 g grass rachis
A1-3	B	1.00	.79	.64	+	.15	+					
A1-4	B	1.00	.57	.05	.01	.52						
CF1	F	1.00	17.40	5.75	.45	11.15					.05	
CF2	F	1.00	17.66	10.06	.54	7.05					.01	
CF3	F	1.00	3.34	.47	.27	2.59					.01	
CF7	B	.29	22.12	15.57	.39	6.16					+	
K2-2	K	1.00	.87	.76	.02	.09						
K4-1	K	1.00	17.43	3.37	.18	13.38					+	
KF2	K	1.00	10.50	2.14	.01	8.35						
TOTAL			232.34	45.54	3.43	131.98	0.79	0.07	0.05	0.18	0.25	
GRAND TOTAL			725.76	135.39	7.76	565.80	2.51	0.30	0.39	10.50	1.46	

Table G-6. Curriboo Plantation (38BK245): Seeds

Provenience	Rice	Maize	Peach	Hawthorn	Bramble	Sumac	Legumes	Goosegrass	Unidentified Grass: Type 1	Other Grasses	*Rumex*	*Polygonum*	*Acalypha*	Unidentified	TOTAL	Other
F1											1			1	2	
F2												1			2	
F8			1						2					13	17	
F12		2												3	3	
F60									1					1	2	
F61									1					1	2	
F62									2					6*	8	*4 possibly *Euphorbia collata*
F63									1	1				6	10	1 grass rachis
F65	2															
A1-2																
A1-3																
A1-4									2					6	12	
CF1	2	2							2	1				7	10	
CF2														1	3	
CF3	1				1									1	1	
CF7																
K2-2							1			1				1	3	
K4-1																
KF2																
TOTAL	5	4	1		1		1		11	3	1	1		47	75	
GRAND TOTAL	19	6	12	1	1	1	14	3	67	5	1	1	1	137	269	

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APPENDIX H

FAUNAL REPORT

ELIZABETH REITZ

AND

KAY WOOD

FAUNAL REPORT FROM THE COOPER RIVER REDIVERSION CANAL PROJECT, 1980

Elizabeth J. Reitz and Kay Wood

The materials analyzed in this report were excavated from three sites in Berkeley County, South Carolina. They are 30 miles inland from the Atlantic Ocean, due north of Charleston, and about one mile south of the Santee River. Excavations were done under the direction of Patrick H. Garrow and Thomas R. Wheaton of SSI, and funding was provided by the Charleston District of the Corps of Engineers. Interagency Archeological Services, Atlanta, administered the project for the Charleston Corps. The sites were to be impacted by the Cooper River Rediversion Canal Project.

The three sites include 38BK75, 38BK76, and 38BK245. The first two sites were areas in a slave quarter on Yaughan Plantation, and the third was a slave quarter on Yaughan Plantation, and the third was a slave quarter area on neighboring Curriboo Plantation. Both plantations were established by French Huguenots in the 1740s and were occupied through the 1820s. These were rice and indigo plantations. Site 38BK75 was a plowed field at the time of excavation and 38BK76 had been logged. A swamp and small creek border these two sites. Most of the materials are from features, or block excavations associated with slave cabins. No faunal materials are from wells. Site 38BK245 had been both plowed and scraped to subsoil prior to excavation. Most of the materials also were recovered from block excavations associated with an office or from features. All materials were recovered using 1/4-inch screen, in the field, and a tea strainer or 1/8-inch screen during flotation.

The faunal materials from these sites were identified and analyzed by Kay Wood and Elizabeth J. Reitz using the comparative skeletal collection at the Zooarchaeology Laboratory, Department of Anthropology, University of Georgia, Athens. Standard zooarchaeological procedures were used as the bones were identified, counted, and weighed. The principle of paired elements as discussed by Donald Grayson (1973) was used to determine minimum number of individuals (MNI).

The results of the work were disappointing primarily because of the condition of the bone. The bone had been subjected to a great deal of post-depositional disturbance due to logging and other agricultural activities. At 38BK245 the bones had been exposed by recent scraping activities and allowed to bake in the sun for over a year. As a result the bones had fused to the clay matrix. Efforts to extract the bone were impossible because of the fragile condition of the bone itself due to other factors.

The mean soil pH of the sites is as follows: 38BK75:soil-5.99, features-5.56; 38BK76:soil-5.96, features-6.37; 38BK245:soil-3.97, features-3.59 (Thomas R. Wheaton, personal communication). In recent tests at the zooarchaeology laboratory it has been found that the natural pH level of mammalian bone is 7.0 to 8.0 and fish bone may be more base than mammal bone. This work will be pursued in the future, but it appears that in this case, with acidic soils and neutral bone, bone preservation would be poor, especially at 38BK245. As a result, identifications were difficult and in many cases impossible. All of the bone weights should be viewed with suspicion. Additionally most evidence of butchering techniques, element distribution, food processing methods, etc., is absent. Further, it is difficult to assess the degree to which the faunal assemblage indicate human behavior at the time of deposition or post-depositional events and differential preservation.

There is very little in the three faunal collections that elicits special comment. At 38BK75 (Tables 1 and 2) most of the bone identifiable to species were from features. Several had been burned and a deer bone had been cut. This might have been a recent cut however. The catfish (Ictalurus sp.) spine fragments indicate some utilization of fish resources. Anserinae include Canada goose, Brant's goose, and White-fronted goose. If these bones are from this subfamily they probably are from a Canada goose (Branta canadensis). Unfortunately, these birds were both wild and tamed (Johnson and Brown 1903), so that it is not possible to classify these as domestic or wild resources. Otherwise, domestic resources are the major faunal component. The materials from 38BK76 (Tables 3 and 4) differ from the neighboring site on the Yaughan Plantation in that oyster is present, and a human molar was identified. Species identified from 38BK245 are somewhat more diverse (Tables 5 and 6). Another set of catfish dorsal spines were identified, as was an opossum tibia, indicating some use of wild resources. Some of the bones were burned, and three were cut, although the cow radius may have been cut recently.

Since highly acidic soils are compounded by mechanical disturbances, it seems reasonable to assume that the faunal patterns observed here are primarily the result of post-depositional actions rather than selective use of fish, birds, and mammals by the slaves. However, four points might be raised. First, since soil conditions at 38BK75 and 38BK76 were more favorable for bone preservation, yet there was actually less bone recovered from Yaughan plantation than at Curriboo, it would appear that there was actually less bone originally deposited in the contexts excavated at Yaughan. Secondly, documentary research for these plantations indicates that dietary supplements of meat purchased through the commercial market were very low (Thomas Wheaton, personal communication). The absence of pigs and cattle may be an indication of human behavior as well as preservation suggesting that domestic meat was not a major part of the diet. This is a substantially different pattern from that observed for nineteenth century plantations on the Georgia sea islands (Gibbs et al. 1980). More in keeping with the expectations formed from the sea island research, is the presence of armaments and fishing equipment. Some type of fishing or hunting equipment was found at both plantations (Thomas Wheaton, personal communication). These materials indicate that the slaves did to some extent exploit wild resources, an activity which is not well

documented in the faunal record. Finally, the ethnobotanical data and documentary research indicate that plant foods were a more significant part of the diet than animal foods (Thomas Wheaton, personal communication). This is, of course, to be expected since most human populations do depend more upon plants than animals as the major caloric source (Moran 1979).

The original intent of the research had been to compare these faunal materials with other faunal collections from slave cabin proveniences, such as that done by John Otto (1975). In all honesty it cannot be done. The disparity in volume among the collections is one factor. This might be discounted, however, if the bones from the Yaughan and Curriboo Plantations were in better condition. Unfortunately, due to depositional factors and bone attrition, there is no confidence on the part of either author that these bones accurately represent the original faunal assemblages, or that analysis of these faunal components would reliably contribute to our understanding of the processes involved in slave subsistence.

As can be seen from the species lists and the above discussion, the results of the identification are incomplete. Preservation and small sample size both contribute to an unreliable picture of species utilization and habitat exploitation. It is clear that some use was made of marine invertebrates, although these may have been exclusively building materials rather than food resources. Wild foods, represented by opossum, deer, and catfish were used at the plantation to some extent. Due to the unreliable nature of the collections it would be unwise to draw conclusions about the role wild foods played in the diet or to what extent specific wild habitat areas were exploited. At the moment it appears that domestic resources, either pigs or cattle, were the major food source. From documentary evidence it appears the pork or beef might have been acquired locally. Further, it is possible that the Cooper plantations indicate a different pattern from that faunal material observed for nineteenth century coastal Georgia plantations. This difference may be the result of time or of environment and certainly merits further study.

Slave subsistence strategies are very poorly understood (Gibbs et al. 1980). Documents from the time period need to be confirmed, clarified, an amplified. This can only be done using archaeological materials. It is not by coincidence that it is proving difficult to do this since most sites occupied by slaves appear to have been more or less continuously used ever since either as living areas or fields. The resulting disturbance to slave context means that good samples will be few and far between. It is therefore necessary that every opportunity be explored as far as possible on the chance that it may prove informative.

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Table H-1. Species List, 38BK75

Species	Ct.	MNI #	MNI %	Wt, gms	Accession No.
Shell	3			6.04	
Mammal	64			161.24	
Sus scrofa pig	5	4	44.4	14.1	75B-F29-6 75-F31-1 75-F31-2 75-4-0
cf. Odocoileus virginianus deer	1	1	11.1	6.5	75B-F29-6
Bos taurus cow	2	2	22.2	16.05	75B-F29-5 75-F31-6
Bird	2			0.81	
cf. Anserinae Goose	3	1	11.1	1.97	75-F29-5
Fish	32			0.51	
Ictalurus sp. catfish	2	1	11.1	0.3	75B-F29-1
Bone	135			112.47	
Total	249	9		319.99	

Table H-2. Burned and Cut Bone from 38BK75

Burned:

Accession #	Ct.	Taxon
75B-F7	1	Bone
75B-F29-1	6	Fish
75B-F29-1	6	Bone
75B-F29-5	18	Bone
75B-F29-7	2	Mammal
75-F31-1	4	Bone
Total	37	

Cut:

Accession #	Ct.	Taxon	Description
75B-F29-6	1	cf. *Odocoileus virginianus*	rt. astragalus, proximal end cut appears recent.

Table H-3. Species List, 38BK76

Species	Ct.	MNI #	MNI %	Wt, gms	Accession No.
Shell	39			15.45	
Gastropod	3			0.6	76-L10-0 76B-F72 76A-U21-1
cf. *Crassostrea virginica* oyster	1			3.81	76A-F43-1
Mammal	79			132.69	
Homo sapiens human	2			1.51	76-F8-1
Sus scrofa pig	1	1	50%	2.63	76B-F87-1
cf. *Bos taurus* cow	2			188.96	76B-U28-2 76-F8-2
Bos taurus cow	2	1	50%	28.78	76B-U28-1 76B-U31-1
Bone	114	—		19.56	
Total	243	2		393.99	

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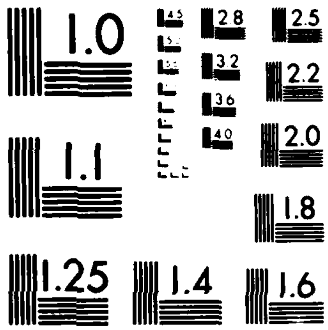

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Table H-4. Burned and Cut Bone from 38BK76

Burned:

Accession #	Ct.	Taxon
76B-U30-1	2	Bone
76B-U28-2	2	Mammal
76-F8-1	7	Mammal
76-I2-2	1	Bone
Total	12	

Cut:

Accession #	Ct.	Taxon	Description
76A-U27-1	6	Mammal	possibly a cut mark on a bone fragment
76A-U16-2	2	Mammal	semi-oval cut on a bone fragment
76B-U28-2	1	cf. *Bos taurus*	rt. radius, looks recent
Total	9		

Species	Ct.	MNI #	MNI %	Wt, gms	Accession No.
Bone	53	—		151.16	
Total	401	10		1347.16	

Table H-5. Species List, 38BK245

Species	Ct	MNI #	MNI %	Wt, gms	Accession No.
Shell	128			318.93	
Gastropod	9			0.17	245C-U3-2(1) 245C-U3-2(3) 245C-U3-2(3) 245C-F1-4
cf. Crassostrea virginica oyster	4			31.44	245-F1-2 245C-U2-1(2)
Mercenaria mercenaria Quahog clam	1			31.22	245-L16-5
Mammal	170			525.72	
cf. Didelphis virginiana opossum	1	1	10%	1.64	245C-F1-4
cf. Sus scrofa pig	1			6.29	245-F3 245-F12-1
Sus scrofa pig	4	3	30%	21.58	245-F3 245B-F11-24 245-F12-6
cf. Bos taurus cow	1			24.72	245-L12-5 245-F63-1
Bos taurus cow	10	3	30%	233.93	245B-F11-2 245B-F11-19 245B-F62-2
Snake	1	1	10%	0.2	245C-U3-2(1)
Fish	16			0.33	
Ictalurus sp. catfish	2	2	20%	0.01	245-F12-6 245-F12-9

Table H-6. Burned and Cut Bone from 38BK245

Burned: Accession #	Ct.	Taxon
245-F31-2	2	Bone
245-F5	2	Bone
245-F12-1	1	Bone
245-F12-4	10	Bone
245-F12-3	1	Bone
245-F12-6	7	Bone
245-F65	1	Bone
Total	24	

Cut: Accession #	Ct.	Taxon	Description
245B-F11-2	1	Bos taurus	radius, distal end, appears recent
245-F12-3	2	Mammal	Butcher marks-sawed carpal fragments
Total	3		

Table H-7. Breakdown of Features 76B-F87 and 76B-F88

76B-F87: Accession #	Shell ct.	Shell wt.	*Sus scrofa* ct.	*Sus scrofa* wt.	Bone ct.	Bone wt.	MNI
F87-1				2.63g	1	0.36g	1
F87-2	1	0.1g			1	Tr	
F87-5					2	0.11g	
F87-8	3	0.06g					
F87-9	7	0.22g					
F87-10	3	0.09g					
Total	14	0.47g		2.63g	4	0.47g	1

76B-F88: Accession #	Shell ct.	Shell wt.	Bone ct.	Bone wt.	MNI
F88-5			3	0.04g	
F88-10	1	Tr			
F88-11	1	0.14g	1	0.07g	
Total	2	0.14g	4	0.11g	0

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